



RESEARCH CENTER

FIELD

**Perception, Cognition and Interaction**

Activity Report 2016

# Section Dissemination

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## CEDAR Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Scientific Events Selection

#### 9.1.1.1. Chair of Conference Program Committees

Y. Diao has been the Program Committee Chair of the ACM Symposium on Cloud Computing (SoCC) 2016, Chair of the ACM Symposium on Cloud Computing, October 2016 and Chair of the Inaugural Paris Big Data Summit, March 2016.

I. Manolescu has been the Program Committee Chair of the International Conference on Scientific and Statistical Database Management (SSDBM) 2016, and the Vision Papers track chair in the Extending Database Technologies (EDBT) conference 2016.

#### 9.1.1.2. Member of the Conference Program Committees

- I. Manolescu has been a member of program committee of the IEEE Conference on Data Engineering (ICDE) 2016, of the Workshop on Data Engineering for the Semantic Web (DESWeb, in conjunction with ICDE) 2016 and of the Workshop on Semantic Big Data (SBD) 2016 in conjunction with the ACM SIGMOD conference.
- M. Thomazo has been member of the PC of ICCS' 16, IJCAI' 16 and PRIMA' 16.

#### 9.1.1.3. Reviewer

- M. Thomazo has reviewed for RR' 16, VLDB' 16 and ICDDT' 17.

### 9.1.2. Journal

#### 9.1.2.1. Member of the Editorial Boards

- Y. Diao is Editor-in-Chief of the ACM SIGMOD Record, Associate Editor of ACM Transactions on Databases (TODS) and Editor of the Proceedings of Very Large Databases (PVLDB), 2016
- I. Manolescu has been an Associate Editor for the ACM Transactions of the Web (TWeb) and a member of the editorial board of PVLDB 2016.

#### 9.1.2.2. Reviewer - Reviewing Activities

- Y. Diao has reviewed for the EDBT vision track
- I. Manolescu has reviewed for the ACM Transactions on Database Systems (TODS).
- M. Thomazo has reviewed for the Journal of Web Semantics.

### 9.1.3. Invited Talks

- I. Manolescu has given an invited talk "Estocada: Flexible Hybrid Stores" at the INESC institute in Portugal.
- I. Manolescu has given an invited talk "CliqueSquare: Flat Plans for Massively Parallel RDF Queries" at the Aalborg University, in Denmark.
- M. Thomazo has presented FactMinder, a tool developed in the prequel of Cedar, to a panel of computer scientists and journalists at the Tech&Check event organized by Duke University

### 9.1.4. Leadership within the Scientific Community

I. Manolescu has been a coordinator of Task 1 (Scalable and Secure Data Processing) of the DataSense axis of the DigiCosme Labex (*Laboratoire d'Excellence*). I. Manolescu has been a member of the ACM SIGMOD Jim Gray PhD Award Committee, of the IEEE TCDE Awards Committee. She has also been a member of the EDBT (Extending Database Technology) Association and of the Steering Committee of BDA (*Bases de Données Avancées*). I. Manolescu has joined the Board of Trustees of the Proceedings of VLDB (PVLDB) Endowment in 2016.

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

- Master: Y. Diao has taught the course “Systems for Big Data Analytics” in the Data Science Master Program of Université Paris Saclay
- Master: I. Manolescu, Architectures for Massive Data Management, 30h, M2, Université Paris-Saclay, France.
- Master: I. Manolescu, Database Management Systems, 52h, M1, École Polytechnique, France.
- Doctorat: I. Manolescu, Scalable Tools for Linked Data Analytics, 20h, Aalborg University, Denmark.
- Master: M. Thomazo, Database Management Systems, 20h, M1, École Polytechnique, France
- Master: M. Thomazo, Introduction to Big Data Systems, 40h, M2, Université Paris-Saclay, France

### 9.2.2. Supervision

Raphael Bonaque: “Structured, Social and Semantic Search”, Université Paris Saclay, September 30, 2016, Bogdan Cautiș, François Goasdoué, and Ioana Manolescu.

Damian Bursztyn: “Scalable Techniques for Web Data Management”, December 15, 2016, François Goasdoué and Ioana Manolescu.

Tien Duc Cao: “Extraction et interconnexion de connaissances appliquée aux données journalistiques”, since October 2016, Ioana Manolescu and Xavier Tannier (LIMSI/CNRS and Université de Paris Sud)

Sejla Čebirić: “CloudSelect: Data Mobility Within, Across and Outside Clouds”, since September 2015, F. Goasdoué and I. Manolescu.

Enhui Huang: Interactive Data Exploration at Scale, since October 2016, Y. Diao.

Y. Diao has as well supervised 5-10 students each semester for the 3A research project and been mentor and chair of the defense of 17 student summer internship projects.

### 9.2.3. Juries

I. Manolescu has been a member of the PhD committee of Raphaël Bonaque and Damian Bursztyn, and a referee and jury member for the PhD of Gonçalo Simões at INESC-ID, Portugal.

## 9.3. Popularization

- M. Thomazo has presented a game based on RDF graphs and social networks as part of Fête de la Science in Inria Saclay, in October.
- The ANR ContentCheck project on **content management techniques for journalistic fact-checking** has attracted news attention in a series of general-audience articles published by Ouest France, Le Devoir (Canada), Rue89, Le Monde, Inria and CNRS, among others:
  - <http://www.ouest-france.fr/leditiondusoir/data/569/reader/reader.html#!preferred/1/package/569/pub/570/page/8>
  - <http://www.ledevoir.com/politique/canada/450937/sur-la-piste-du-mensonge>
  - <http://rue89.nouvelobs.com/2015/10/26/algorithmes-antimensonge-fin-bobards-politique-261827>
  - <http://data.blog.lemonde.fr/2015/10/23/le-fact-checking-peut-il-sautomatiser/>
  - <http://www.inria.fr/centre/saclay/actualites/un-logiciel-de-fact-checking-pour-comprendre-le-monde-qui-nous-entoure>
  - <https://lejournal.cnrs.fr/articles/un-logiciel-qui-decrypte-la-politique>

The project has also lead to an interview by Science Po students studying in the Communication Master of the school, around automated fact-checking topics: <https://inciviveritas.wordpress.com/menu-page/lautomatisation-du-fact-checking/>.

## DAHU Project-Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Scientific events organisation

#### 9.1.1.1. General chair, scientific chair

Serge Abiteboul co-organized the workshop "Data, responsibly" at Dagstuhl on ethics in massive data analysis.

### 9.1.2. Scientific events selection

#### 9.1.2.1. Member of the conference program committees

Serge Abiteboul: Data engineering (ICDE'2016); In 2016, Serge Abiteboul also participated in Awards committees for the French Academy of Sciences and Inria.

Victor Vianu: FOIKS'16.

#### 9.1.2.2. Reviewer

The members of the team reviewed numerous papers for numerous international conferences and journals.

### 9.1.3. Journal

#### 9.1.3.1. Member of the editorial boards

Victor Vianu: Associate Editor of ACM TOCL, Editor of the Database Theory column in SIGACT News.

### 9.1.4. Invited talks

Victor Vianu gave invited talks at the Dagstuhl Workshop on Foundations of Data Management, April 2016; POLARIS Colloquium, Univ. of Lille, June 2016; and Ecole Polytechnique, Saclay, July 2016.

Serge Abiteboul gave invited talks in international meetings at Int'l Symp. on DIStributed Computing in Paris, Didapro 6 in Namur, Dagstuhl Workshop on Foundations of Data Management, Dagstuhl workshop on Data, Responsibly, and Paris Open Source Summit.

### 9.1.5. Leadership within the scientific community

Serge Abiteboul is co-chair of the Parity and Equality committee of Inria.

### 9.1.6. Scientific expertise

Sylvain Schmitz reviewed grant proposals for the Agence Nationale de la Recherche (ANR).

### 9.1.7. Research administration

Since 2015 Luc Segoufin is an elected member of the CNHSCT of Inria.

Serge Abiteboul chaired the selection committee for the call for proposal Dune "Développement d'Universités Numériques Expérimentales"/

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

Licence : Sylvain Schmitz, Formal Languages, 22.5h, L3, ENS Cachan, France

Master : Sylvain Schmitz, Tree Automata Techniques and Applications, 22.5h, M1, ENS Cachan, France

Master : Sylvain Schmitz, Formal Languages, 30h, M2, ENS Cachan, France

Master : Sylvain Schmitz, Logic, 26.3h, M2, ENS Cachan, France

Master : Sylvain Schmitz, Logical and Computational Structures for Linguistic Modeling, 18h, M2, ENS Cachan, France

Master2 : Serge Abiteboul, Web data management, 15h, MPRI

Master1 : Serge Abiteboul, Initiation to scientific research (lab), 15h

Licence : Serge Abiteboul, Relational databases, 30h, ENS Cachan

#### E-learning

Mooc Bases de Données Relationnelles - Bador (in French), Inria Fun, Serge Abiteboul, Benjamin Nguyen and Philippe Rigaux, Start January 2016; about 6000 students registered, 6+ weeks. Target audience: students in L3/Master, engineers and scientists using databases.

### 9.2.2. Supervision

PhD in progress: Nathan Grosshans, branching program, 01/09/2014, Luc Segoufin and Pierre McKenzie (University of Montreal)

PhD in progress: David Montoya, Personal information management systems, 01/02/2014, Serge Abiteboul

PhD in progress: Alexandre Vigny, enumeration, 01/09/2015, Luc Segoufin and Arnaud Durand

PhD in progress: Karima Rafes, Web semantic and Internet of Thing, 01/02/2015, Serge Abiteboul

PhD in progress: Simon Halfon, Well quasi orders, 01/09/2015, Sylvain Schmitz and Philippe Schnoebelen

PhD in progress: Anthony Lick, Proof systems for data queries, 01/09/2016, David Baelde and Sylvain Schmitz

PhD in progress: Su Yang, Analytics in Personal information management systems, 01/09/2016, Serge Abiteboul et Pierre Senellart

### 9.2.3. Juries

Luc Segoufin was on the Ph.D committee of Florent Capelli, Université de Paris 7, in June 2016.

Sylvain Schmitz was on the Ph.D. committees of Silva Stella, Università degli studi di Torino, in January 2016, and of Michael Blondin, Université de Montréal, in June 2016.

Serge Abiteboul was on the Ph.D. committee of Damian Bursztyn, University of Paris-Saclay, in December 2016.

## 9.3. Popularization

For the last couple of years, Serge Abiteboul has initiated and is coordinating an invited blog for Le Monde newspaper, namely Binaire, <http://binaire.blog.lemonde.fr>. He is the initiator of “The Cabale Informatique de France”, a joint action between the Société Informatique de France and Wikipédia France to improve the quality of Wikipédia pages about Computer Science in France. He organized a Workshop Initiation to Wikipedia in Poitiers



Serge Abiteboul is Scientific curator of the exhibit "Terra Data" at Cité des Sciences de La Villette, 2017. He is member of the editorial board of Les big data à découvert, directed Mokrane Bouzeghoub and Rémy Mosseri. He gave invited talks at La Pépinière 4.1 in Nancy, Rencontres du Numérique of ANR, Parole Publique, Sciences à Coeur at Sorbonne Univ., Espace Mendes France at Poitiers,

Serge Abiteboul is Chairman of the Executive Council of the Foundation Blaise Pascal for the promotion of Maths and Computer Science.

## EXMO Project-Team

# 8. Dissemination

## 8.1. Promoting Scientific Activities

### 8.1.1. Scientific Events Organisation

#### 8.1.1.1. Member of the Organizing Committees

- Jérôme Euzenat was organiser of the 11th Ontology matching workshop of the 15th ISWC, Kobe (JP), 2016 (with Pavel Shvaiko, Ernesto Jiménez Ruiz, Michele Cheatham, Oktie Hassanzadeh and Ryutaro Ichise),

### 8.1.2. Scientific Events Selection

#### 8.1.2.1. Member of Conference Program Committees

- Manuel Atencia, Jérôme David and Jérôme Euzenat have been programme committee members of the conference “European conference on artificial intelligence (ECAI)” 2016
- Jérôme Euzenat was programme committee member of the “International conference on Knowledge Representation and Reasoning (KR)” 2016
- Manuel Atencia and Jérôme Euzenat have been programme committee members of the “International semantic web conference (ISWC)” 2016
- Manuel Atencia, Jérôme David and Jérôme Euzenat have been programme committee members of the “European Semantic Web Conference (ESWC)” 2016
- Jérôme Euzenat was programme committee member of the “International Conference on Formal Ontologies for Information Systems (FOIS)” 2016
- Jérôme Euzenat was programme committee member of the “International Conference on Conceptual Structures (ICCS)” 2016
- Jérôme Euzenat was programme committee member of the “International Conference on Web Information Systems and Technologies (WebIST)” 2016
- Tatiana Lesnikova and Jérôme Euzenat have been scientific committee member of the “Language resources and evaluation conference (LREC)” 2016
- Jérôme Euzenat was programme committee member of the “French fundamental artificial intelligence days” (JAIF) 2016
- Jérôme David was programme committee member of the ISWC “Ontology matching” workshop (OM) 2016
- Jérôme David was programme committee member of the EGC workshop on “quality of linked open data” (QLOD) 2016
- Jérôme Euzenat was programme committee member of the ESWC workshop on “Completing and Debugging the Semantic Web (CoDeS)”, 2016.
- Jérôme Euzenat was programme committee member of the ECAI workshop on “Diversity-aware artificial intelligence”, 2016.

#### 8.1.2.2. Reviewer

- Jérôme David and Tatiana Lesnikova have been a reviewer for the 15th “International Semantic Web Conference (ISWC)”, 2016.

### 8.1.3. Journal

#### 8.1.3.1. Member of the Editorial Boards

- Jérôme Euzenat is member of the editorial board of *Journal of web semantics* (area editor), *Journal on data semantics* and the *Semantic web journal*.

#### 8.1.3.2. Reviewer - Reviewing Activities

- Manuel Atencia has been reviewer for *Semantic web journal* and *ACM transactions on database systems*.
- Jérôme David has been reviewer for *Artificial intelligence review* and *Semantic web journal*.
- Jérôme Euzenat has been reviewer for *IEEE transactions on knowledge and data engineering*, *Knowledge and information systems* and *Artificial intelligence review*.

#### 8.1.4. Invited Talks

- “Extraction de clés de liage de données”, Invited talk, 16e conférence internationale francophone sur l’extraction et la gestion des connaissances (EGC), Reims (FR), 2016-01-21 (Jérôme Euzenat).
- Series of four seminars at UniRio, Rio de Janeiro (BR): “Introduction to ontology matching and alignment” 2016-03-11, “Repairing alignments and cultural evolution” 2016-03-17, “Data link key extraction (and relation with Formal concepts analysis)” 2016-03-22, “(Belief) revision in networks of ontologies” 2016-03-30 (Jérôme Euzenat).
- “Introduction to ontology matching and alignment”, Seminar IBM Research, Rio de Janeiro (BR), 2016-03-23 (Jérôme Euzenat).
- “Semantic web evolution: tectonic quake or gentle drift?”, Invited talk, 12th International Conference on Web Information Systems and Technologies (WebIST), Roma (IT), 2016-04-24 (Jérôme Euzenat).
- “Knowledge change, failure, adaptation, and evolution”, Invited talk, 2nd Joint ontology workshops (JOWO), Annecy (FR), 2016-07-06 (Jérôme Euzenat).
- “Data interlinking with formal concept analysis and link keys”, Invited talk, 13th international conference on concept lattices and applications (CLA), Moskow (RU), 2016-07-19 (Jérôme Euzenat).
- “Fixing knowledge in the distributed age”, Invited tutorial, 10th international conference on scalable uncertainty management (SUM), Nice (FR), 2016-09-21 (Jérôme Euzenat).

#### 8.1.5. Leadership within the Scientific Community

- Jérôme Euzenat is member of the executive committee and the scientific council of the CNRS Pre-GDR “Artificial intelligence”.

#### 8.1.6. Scientific Expertise

- Jérôme David has been consulting for the start-up Budplace.

## 8.2. Teaching - Supervision - Juries

### 8.2.1. Teaching

#### 8.2.1.1. Responsibilities

- Jérôme David is coordinator, with Véronique Sansonnet, of the Master “Mathématiques et informatiques appliquées aux sciences humaines et sociales” (Univ. Grenoble Alpes);
- Manuel Atencia is coordinator of option “Web, Informatique et Connaissance” of Master M1 “Mathématiques et informatiques appliquées aux sciences humaines et sociales” (Univ. Grenoble Alpes);
- Jérôme Euzenat is, with Sihem Amer-Yahia, coordinator of the “AI and the web” option of the M2R in computer science and applied mathematics (Univ. Grenoble Alpes).

#### 8.2.1.2. Lectures

Licence: Jérôme David, Algorithmique et programmation par objets, 90h, L2 MIASHS, UGA, France

Licence: Jérôme David, Introduction à Python, Licence ESSIG, 24h, UGA, France

Licence: Manuel Atencia, Technologies du Web, LP ESSIG, 18h, UGA, France

Licence: Manuel Atencia, Introduction aux technologies du Web, 60h, L3 MIASHS, UGA, France

Master: Jérôme David, Programmation Java 2, 45h, M1 MIASHS, UGA, France

Master: Jérôme David, Documents XML, 30h, M1 MIASHS, UGA, France

Master: Manuel Atencia, Langages et technologies du Web 2, 21h, M1 MIASHS, UGA, France

Master: Manuel Atencia, Introduction à la programmation web, 30h, M1 MIASHS, UGA, France

Master: Manuel Atencia, Intelligence Artificielle, 7,5h, M1 MIASHS, UGA, France

Master: Jérôme David, JavaEE, 30h, M2 MIASHS, UGA, France

Master: Jérôme David, Développement Web Mobile, 30h, M2 MIASHS, UGA, France

Master: Manuel Atencia, Web Sémantique, 30h, M2 MIASHS, UGA, France

Master: Jérôme Euzenat, Semantic web: from XML to OWL, 23heqTD, M2R, UGA, France

Post-graduate level: Jérôme Euzenat, “Ontology matching”, 1h30, Tutorial, 13th international conference on concept lattices and applications (CLA), Moskow (RU), 2016

## 8.2.2. Supervision

### 8.2.2.1. PhD

- PhD: Armen Inants, “Qualitative calculi with hererogeneous universes”, Univ. Grenoble Alpes, 2016-04-25
- PhD: Tatiana Lesnikova, “RDF data interlinking: evaluation of cross-lingual methods”, Univ. Grenoble Alpes, 2016-05-04

### 8.2.2.2. Master

- MSc: Mashruf Chowdury, Agreement and disagreement between ontologies, M2R Informatics, Univ. Grenoble Alpes, June 2016
- MSc: Irina Dragoste, Ontology evolution through interaction, M2R Informatics, Univ. Grenoble Alpes, September 2016
- MSc: Maroua Gmati, Reasoning with link keys, M2R Informatics, Univ. Grenoble Alpes, June 2016

## 8.2.3. Juries

- Jérôme Euzenat has been external examiner of the computer science PhD of Filip Radulovic (Universidad Politécnica de Madrid) “RIDER: a recommendation framework for exploiting evaluation results and user quality requirements” supervised by Asunción Gómez-Pérez, 2016
- Manuel Atencia has been external examiner of the computer science PhD of Daniel Vila Suero (Universidad Politécnica de Madrid) “A framework for ontology-based library data generation, access and exploitation” supervised by Asunción Gómez-Pérez and Jorge Gracia del Rio, 2016
- Jérôme Euzenat has been external examiner of the computer science PhD of Damien Graux (Université Grenoble Alpes) “On the efficient distributed evaluation of SPARQL queries” supervised by Nabil Layaïda and Pierre Genevès, 2016

## 8.3. Popularization

- Jérôme Euzenat gave a training conference in computer science for high-school teachers on “Language and semantics”, Inria, Montbonnot (FR), 2016-02-10

## GRAPHIK Project-Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Scientific Events Organisation

#### 9.1.1.1. General Chair, Scientific Chair

##### 9.1.1.1.1. 2016 Events

- We were local co-organizers (with the Coconut team at LIRMM) of the French workshop JIAF (Journées d'Intelligence Artificielle Fondamentale), held in Montpellier in June 2016, in conjunction with the JFPC, the Journées de Programmation par Contraintes (JFPC). [https://www.supagro.fr/jfpc\\_jiaf\\_2016/index\\_jiaf.php](https://www.supagro.fr/jfpc_jiaf_2016/index_jiaf.php)
- Still with Coconut team at LIRMM, we also welcomed the opening days of the National CNRS Group on theoretical and algorithmic aspects of Artificial Intelligence (pre-GDR IA) in Jun. 2016.
- Marie-Laure Mugnier co-organized the workshop “Ontologies and logic programming for query answering” co-located with IJCAI 2016 <http://ontolp.lsis.org/>

##### 9.1.1.1.2. 2017 Events

- We are organizing the 30th Workshop on Description Logics, to be held in July 2017 in Montpellier. The general chairs are Meghyn Bienvenu and Marie-Laure Mugnier. <https://project.inria.fr/dl2017/>
- Madalina Croitoru will co-organise the 5th International Workshop of Graph Based Knowledge Representation and Reasoning collocated with IJCAI 2017 in Melbourne Australia. The organiser list is the same as GKR 2015. More information about past editions can be found at: <https://www.lirmm.fr/~croitoru/GKR/>
- Madalina Croitoru and Pierre Bisquert will organize a special session “Agronomy and AI” at IEA-AIE 2017 (30th International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems) <http://www.cril.univ-artois.fr/ieaaie2017/main/specialtracks/>

### 9.1.2. Scientific Events Selection

#### 9.1.2.1. Member of the Conference Program Committees

We are regularly members of the program committees of the main generalist conferences in AI (i.e., IJCAI, AAAI, ECAI) and more specialized conferences and workshops (KR, the main conference in knowledge representation and reasoning, RR — Web reasoning and Rule Systems, SUM — International Conference on Scalable Uncertainty Management, COMMA — International Conference on Computational Models of Argument, Metadata and Semantics Research Conference, etc.)

For 2016, we served in the following program committees:

- IJCAI 2016 (21st International Conference on Artificial Intelligence): 1 senior PC + 3 PC
- ECAI 2016 (22nd European Conference on Artificial Intelligence): 2 PC
- ISWC 2016 (15th International Semantic Web Conference): 1 PC
- AAAI 2016 (30th AAAI Conference on Artificial Intelligence): 2 PC
- DL 2016 (29th International Workshop on Description Logics): 2 PC
- RR 2016 (10th International Conference on Web Reasoning and Rule Systems): 2 PC
- FOIS 2016 (9th International Conference on Formal Ontology in Information Systems): 1 PC
- BDA 2016 (Gestion de Données — Principes, Technologies et Applications): 1 PC
- FoIKS 2016 (9th International Symposium on Foundations of Information and Knowledge Systems): 1 PC
- CARI 2016 (13ème Colloque Africain sur la Recherche en Informatique et Mathématiques Appliquées): 1 PC
- IC 2016 (27es journées francophones d'Ingénierie des Connaissances): 1 PC
- MTSR 2016, AgroSEM Special track (10th Metadata and Semantics Research Conference): 1 PC
- LFA 2016 (25ème Conférence sur la Logique Floue et ses Applications): 1 PC

For 2017, we will serve in the following program committees (list not exhaustive yet):

- IJCAI 2017 (22nd International Conference on Artificial Intelligence): 1 senior PC, 1 PC
- AAAI 2017 (31st AAAI Conference on Artificial Intelligence): 2 PC
- PODS 2017 (36th International Conference on the Principles of Database Systems): 1 PC
- ICDT 2017 (20th International Conference on Database Theory): 1 PC
- SIGMOD 2017 (ACM SIGMOD International Conference on Management of Data): 1 PC
- EGC 2017 (Extraction et Gestion des Connaissances): 1 PC
- IC 2017 (28èmes journées francophones d'Ingénierie des Connaissances): 1 PC

### 9.1.3. Journal

#### 9.1.3.1. Member of the Editorial Boards

Patrice Buche Member of the ARIMA Editorial Board (<http://arima.inria.fr/docs/04redaction.html>)

Rallou Thomopoulos is chapter coordinator in 2016 special issue of the IFSET journal, and member of the proposal committee of the special issue 2011 of the RNTI journal (Revue des Nouvelles Technologies de l'Information) on the topic of the evaluation of methods in EKD (Extraction of Knowledge from Data).

#### 9.1.3.2. Reviewer - Reviewing Activities

Reviews for *Artificial Intelligence* and *Journal of Artificial Intelligence Research* (JAIR).

### 9.1.4. Invited Talks

- Meghyn Bienvenu was invited speaker at IJCAI 2016 (International Joint Conference in Artificial Intelligence), Early Career Spotlight track: "Ontology-mediated query answering : Harnessing knowledge to get more from data"
- Meghyn Bienvenu was keynote speaker at RR 2016 (International Conference on Web Reasoning and Rule Systems): "Query rewriting : Limits and possibilities"
- Meghyn Bienvenu was invited speaker at Reasoning Web (RW) Summer School 2016: "Inconsistency-Tolerant Querying of Inconsistent Description Logic Knowledge Bases"
- Meghyn Bienvenu (with Magdalena Ortiz) was invited speaker at ESSLLI 2016 (European Summer School in Logic, Language and information): "Ontology- Mediated Query Answering with Horn Description Logics"

### 9.1.5. Invited Seminars

- Efsthios Delivourias gave a talk at the Computational Logic Group Seminar Dresden 2016.
- Meghyn Bienvenu gave a talk at the Séminaire Inria CEDAR 2016.
- Marie-Laure Mugnier, Rallou Thomopoulos, Bruno Yun and Patrice Buche gave talks at the INRA research school "intégration de connaissances et modèles", Nantes, Nov. 2016

### 9.1.6. Leadership within the Scientific Community

- **Scientific animation at INRA:** Patrice Buche co-animates the national network INRA IN-OVIVE, devoted to methods and tools for big data management in life sciences, agronomy and food processing <http://www6.inra.fr/reseau-in-ovive>  
In particular, he co-organized three editions of the IN-OVIVE workshop dedicated to heterogeneous data sources integration in life sciences during the French conference IC (ingénierie des connaissances) from 2013 to 2016 [https://workshop.inra.fr/in\\_ovive\\_2016/Programme](https://workshop.inra.fr/in_ovive_2016/Programme)  
Patrice Buche is also co-animator (2012-2017) at the national level of the INRA CATI ICAT "Ingénierie des connaissances et analyse textuelle" <http://www6.inra.fr/cati-icat/Presentation>. Moreover, he co-animates the regional seminar MIAD (Mathematical models for decision making in environment, agronomy and processing of agricultural resources).

- **Scientific animation at the national level:** Marie-Laure Mugnier is member of the animating committee of the pre-GDR “Aspects algorithmiques de l’Intelligence Artificielle” <http://www.gdria.fr> and of the organizing committee of the workshop “Journées d’Intelligence Artificielle Fondamentale” (JI AF, the annual meeting of the French community on the foundations of AI) [http://icube-web.unistra.fr/gdri3/index.php/Thème\\_1:\\_Intelligence\\_Artificielle\\_Fondamentale](http://icube-web.unistra.fr/gdri3/index.php/Thème_1:_Intelligence_Artificielle_Fondamentale)  
Rallou Thomopoulos is co-leader (together with César Acéves, INSA Toulouse) of the trans-unit program “InCom” (Knowledge and Model Integration) of the CEPIA Division of INRA.

### 9.1.7. Scientific expertise

- Rallou Thomopoulos and Madalina Croitoru are members of the management committee of the European cooperation network (COST) "Mathematical and Computer Science Methods for Food Science and Industry", accepted in Nov. 2105. [http://www.cost.eu/COST\\_Actions/ca/CA15118](http://www.cost.eu/COST_Actions/ca/CA15118)[http://www.cost.eu/COST\\_Actions/ca/CA15118?management](http://www.cost.eu/COST_Actions/ca/CA15118?management)
- Marie-Laure Mugnier is member of the scientific advisory board of the Food and Bioproducts department (CEPIA) at INRA (2011-2016).
- Michel Chein is member of the scientific advisory board of ABES (French Agency for Academic Libraries), (2010-2016)
- Patrice Buche participates to the Wheat Data initiative of Research Data Alliance, whose objective is to propose recommendations for wheat and other cereals data <http://ist.blogs.inra.fr/wdi/> (2015-2016)
- Marie-Laure Mugnier was member of the HCERES 2016 evaluation committee for IRISA.
- We also participate to punctual expertise tasks, as experts for ANR, INRA and Inria.

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

The six faculty members teach at all university levels (IUT, Licence, Master). The main courses they are in charge of are: Logics (L), Web Technologies (IUT), Artificial Intelligence (M), Knowledge Representation and Reasoning (M), Social and Semantic Web (M). Some full-time researchers give Master courses (J.-F. Baget 40H; M. Bienvenu 15H).

In addition, Rallou Thomopoulos has been lecturer in the 2015-2016 “Multicriteria Decision Methods” training session, and instructor in the “Companion Modeling” and “Data, Knowledge and Model Integration” 2016 training programs of Laval University (Quebec).

Moreover, faculty members have some specific responsibilities in the Computer Science Licence and Master:

- Michel Leclère (Faculty): since 2011, he manages the program “Data, Knowledge and Natural Language Processing” (DECOL), part of the Master of Computer Science (about 30 students). This program is co-managed by Federico Ulliana (Faculty) since 2016.
- Marie-Laure Mugnier (Faculty): since 2011, she is (co)-director of the Master in Computer Science, which gathers 6 programs (about 250 students). She also led the Master project for the next four years (LMD4, from 2015/16 to 2018/2019).
- Madalina Croitoru (IUT): since Sept. 2014, she manages the “année spéciale” (about 25 students).

### 9.2.2. Involvement in University Structures

- Michel Leclère: since Sept. 2015, he is deputy manager of the Computer Science teaching Department from the Science Faculty, University of Montpellier.
- Marie-Laure Mugnier: since 2016, she is member of the “pôle de formation et de recherche” MIPS (Mathématiques, Informatique, Physique et Systèmes) of the University of Montpellier.

### 9.2.3. Supervision

#### 9.2.3.1. Thesis defended in 2016

- Namarata Patel defended her PhD thesis “Mise en oeuvre de préférences dans les problèmes de décision” on Oct., 7 2016 in Montpellier. Advisor: Souhila Kaci (Univ. Montpellier), co-advisor: Roland Ducournau (Univ. Montpellier), reviewers: Jérôme Lang (CNRS, LAMASADE) and Nic Wilson (Univ. College Cork), jury members: Farid Nouioua (Univ. Aix-Marseille) and Nadjib Lazaar (Univ. Montpellier).
- Abdallah Arioua defended his PhD thesis “Formalizing and Studying Dialectical Explanations in Inconsistent Knowledge Bases” on Oct., 17 2016 in Montpellier. Advisors: Patrice Buche (UMR IATE) and Madalina Croitoru (Univ. Montpellier), reviewers: Anthony Hunter (Univ. College London) and Nicolas Maudet (Univ. Pierre et Marie Curie), jury members: Juliette Dibia (AgroParis-Tech), Leila Amgoud (IRIT), Bernard Cuq (Montpellier SupAgro) and Jérôme Fortin (Univ. Montpellier).
- Fabien Garreau defended his PhD thesis “Extension d’ASP pour couvrir des fragments DL traitables : étude théorique et implémentation” on Nov., 24 2016 in Angers. Advisor: Igor Stephan (Univ. Angers), co-advisors: Jean-François Baget (Inria) and Laurent Garcia (Univ. Angers), reviewers: Andreas Herzig (IRIT) and Philippe Lamarre (INSA Lyon), jury members: Odile Papini (Univ. Aix-Marseille), Claire Lefevre (Univ. Angers) and Marie-Laure Mugnier (Univ. Montpellier).
- Swan Rocher defended his PhD thesis “Querying Existential Rule Knowledge Bases: Decidability and Complexity” on Nov., 25 2016 in Montpellier. Advisor: Marie-Laure Mugnier (Univ. Montpellier), co-advisor: Jean-François Baget (Inria), reviewers: Marie-Christine Rousset (Univ. Grenoble) and Sebastian Rudolph (TU Dresden), jury members: Andreas Pieris (Univ. Edinburgh) and Christophe Paul (CNRS, LIRMM).

#### 9.2.3.2. Ongoing thesis

PhD in progress are:

- Stathis Delivourias. Supervisors: Federico Ulliana, Michel Leclère and Marie-Laure Mugnier. “Boundedness and Module extraction in Existential Rules KBs”. Started Oct. 2015.
- Abdelraouf Hecham. Supervisors: Madalina Croitoru and Pierre Bisquert. “Logical argumentation with dual cognitive systems”. Algerian National Ministry Grant 2015-2018.
- Bruno Yun. Supervisors: Madalina Croitoru, Rallou Thomopolous, Srdjan Vesic. “Decision Making and Ranking Semantics in Logical Argumentation Frameworks”. French National Ministry Grant 2016-2019.

### 9.2.4. Juries

In the following list, we exclude our participation in the PhD juries of GraphIK PhD Students.

- Marie-Laure Mugnier was PhD jury president - Christopher Beatrix - University of Nantes /LERIA - November 2016
- Meghyn Bienvenu was PhD co-supervisor - Camille Bourgaux - University of Orsay / LRI - September 2016
- Marie-Laure Mugnier was PhD reviewer - Camille Bourgaux - University of Orsay / LRI - September 2016



- Marie-Laure Mugnier was HDR reviewer - Nathalie Pernelle - University of Orsay / LRI - June 2016
- Patrice Buche was PhD reviewer - Fatma Chamekh - University of Jean Moulin / Lyon 3- December 2016
- Patrice Buche was HDR examiner - Nathalie Pernelle - University of Orsay / LRI - June 2016
- Federico Ulliana was member of the selection committee for a “Maître de conférence” position in Paris Dauphine

## LACODAM Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. Member of the Organizing Committees

- Local chair of the Mini-symposium on instant data mining, interactive data mining, preference-based pattern mining, Rennes, October 26-28, 2016 (A. Termier)
- Organization chair (T. Guyet) and program committee members (T. Guyet, R. Quiniou) of GAST workshop at EGC 2017 and at EGC 2016.

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Member of the Conference Program Committees

EGC 2017 (T. Guyet, R. Quiniou, A. Termier).  
ICDM 2016 (A. Termier)  
KDD 2016 (A. Termier)  
IJCAI 2016 (T. Guyet, B. Negrevergne)  
ECAI 2016 (T. Guyet)  
KR 2016 (T. Guyet)  
RFIA/CNIA 2016 (T. Guyet)  
APIA 2016 (C. Largouët)

#### 10.1.2.2. Reviewer

R. Quiniou: KDD 2016, ECAI 2016, IJCAI 2016, ICDM 2016, CNIA 2016, AKDM7  
T. Guyet: KDD 2016, ECAI 2016, IJCAI 2016, ICDM 2016, RFIA/CNIA 2016, KR 2016, AALTD16, SimBig 2016  
A. Termier: IJCAI 2016  
Y. Dauxais, C. Gautrais: IJCAI 2016, ICDM 2016, KDD 2016, EGC 2016

### 10.1.3. Journal

#### 10.1.3.1. Member of the Editorial Boards

T. Guyet: RIA (Revue d'Intelligence Artificielle)

#### 10.1.3.2. Reviewer - Reviewing Activities

A. Termier: Data Mining and Knowledge Discovery, Knowledge and Information Systems, Discrete Applied Mathematics  
T. Guyet: Journal of Biomedical Informatics, AI Communications, ACM Computing Surveys, TKDE  
C. Gautrais: Data Mining and Knowledge Discovery

### 10.1.4. Invited Talks

A. Termier gave an invited talk at the SMiLe 2016 workshop.  
C. Largouët gave a invited talk at the UMR-AMURE Seminar on the 15th september 2016,

### 10.1.5. Leadership within the Scientific Community

A. Termier is the representative of Inria for the #DigitAg Convergence Institute  
 T. Guyet is member of the AFIA board (since October 2011). AFIA is the French chapter of ECCAI, the European Association for Artificial Intelligence.

### 10.1.6. Scientific Expertise

Evaluation of a project proposal for the ANR: R. Quiniou  
 Evaluation of a project proposal for the Medicen competitive cluster: T. Guyet

### 10.1.7. Research Administration

Member of INRA CEI (Engineers Evaluation Committee): T. Guyet  
 Member of the scientific board of department EA of INRA: A. Termier  
 Member of the scientific board of Agrocampus Ouest - COREGE: C. Largouët.

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

Many members of the project-team Lacodam are also faculty members and are actively involved in computer science teaching programs in ISTIC, INSA and Agrocampus-Ouest. Besides these usual teachings Lacodam is involved in the following programs:

**Master 2** Module DSS: Apprentissage sur des données séquentielles symboliques, 10 h, M2, Istic University of Rennes 1 (R. Quiniou)

**Master 2** Géoinformation, Agrocampus Ouest Rennes (L. Bonneau, T. Guyet)

**Master 2** Artificial Intelligence, Agrocampus Ouest Rennes (Louis Bonneau, C. Largouët)

**Master 1** Scientific Programming, Data Management, Python Programming, Agrocampus Ouest Rennes (C. Largouët)

### 10.2.2. Supervision

PhD in progress: Maël Guillemé, "New data mining approaches for improving energy consumption in factory", October 3rd 2016, Alexandre Termier, Véronique, Masson and Laurence Rozé

PhD in progress: Clément Gautrais, "Mining massive data from client purchases", October 1st 2015, Alexandre Termier, Peggy Cellier, Thomas Guyet and René Quiniou

PhD in progress: Yann Dauxais, "Query-language for care-pathway mining and analysis", February 1st 2015, David Gross-Amblard, Thomas Guyet, André Happe

PhD in progress: Alban Siffer, "DataMining approaches for cyber attack detection", March 2016, Pierre-Alain Fouque, Alexandre Termier, Christine Largouët

### 10.2.3. Juries

Committee member of Rémy Dautriche Phd defense (Université de Grenoble Alpes): A. Termier

Reviewer of Olivier Cavadenti Phd (INSA Lyon): A. Termier

Committee member of Samir Loudni HDR (Université de Caen): A. Termier

Thesis advisory committee member of Jean Coquet (Univ. Rennes 1): A. Termier

Thesis advisory committee member of Benoit Bellot (INRA/IGEPP): T. Guyet

Thesis advisory committee member of Zhi Cheng (UNC/PPME): T. Guyet

## 10.3. Popularization

M.-O. Cordier is editorial board member of Interstices webzine.

## LINKS Project-Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Scientific Events Selection

#### 9.1.1.1. Member of the Conference Program Committees

J. Niehren was member of the program committees of LPAR (International Conference on Logic Programming and Automatic Reasoning) 2016.

S. Tison is member of the program committees of FSCD (First International Conference on Formal Structures for Computation and Deduction) 2016.

S. Staworko is member of the program committees of PODS (ACM Symposium on Principles of Database Systems) 2016.

I. Boneva was member of program committee of EDBT (International Conference on Extending Database Technology) 2016 Vision Track.

P. Bourhis was member of program committee of Provenance week 2016, IJCAI (International Joint Conference on Artificial Intelligence) 2016.

#### 9.1.2. Journal

##### 9.1.2.1. Member of the Editorial Boards

S. Tison is in the editorial committee of RAIRO-ITA (Theoretical Informatics and Applications).

J. Niehren is in the editorial board of Fundamenta Informaticae.

##### 9.1.2.2. Reviewer - Reviewing Activities

Too many to be enumerated.

#### 9.1.3. Leadership within the Scientific Community

S. Tison has been member of the "Comité National de la Recherche Scientifique (CoNRS)" (Section 6) until June 2016.

#### 9.1.4. Scientific Expertise

P. Bourhis has expertised a project in the 'Recherche Formation Innovation Atlantic' program of Pays de la Loire Region.

S. Tison has been a member of the scientific board of the company See-d

#### 9.1.5. Research Administration

S. Tison is an elected member of the academic council of "ComUE Lille Nord de France " since November 2015.

S. Tison is a vice president of the University of Lille 1 since October 2015, where she is responsible for industrial partnerships, innovation, and valorisation.

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

Bachelor : S. Tison, Discrete Mathematics, 36h, Université Lille 1, France

Bachelor : S. Salvati, Computer Science Info, L1, 96h, Université de Lille 1, France

Bachelor : S. Salvati, Automata and Languages, L3, 36h, Université de Lille 1, France

Bachelor : S. Salvati, Algorithmic and Operational Research, L3, 36h, Université de Lille 1, France  
 Master 2 (MOCAD): P. Bourhis and J. Niehren Information extraction, 20h30, M2, Université Lille 1, France  
 Master 2 (MOCAD) : I. Boneva and P. Bourhis, Algorithms for Database, 21h, M1, Université Lille 1, France  
 Master 1 : S. Tison, Advanced algorithms and complexity, M1, 54h, Université Lille 1, France  
 Master 1 : S. Tison, Business Intelligence, M1, 28h, Université Lille 1, France  
 Master 1 : A. Lemay, XML Technologies, 16h, M2, Université Lille 3, France  
 Master 1 : S. Staworko is co-head of the master 'Web Analyst' in Université Lille 3, France  
 DUT : I. Boneva, 100h, Université Lille 1, France  
 A. Lemay is pedagogical responsable for Computer Science and numeric correspondant for UFR LEA Lille 3.

### **9.2.2. Supervision**

PhD defended : T. Sebastian, Streaming algorithms for XPath. 2011-2016. Supervised by Niehren.  
 PhD defended: A. Boiret. Normalization and Learning of Transducers on Trees and Words. 2011-2016. Supervised by Niehren and Lemay.  
 PhD in progress: D. Gallois. Since 2015. Recursive Queries. Supervised by Bourhis and Tison.  
 PhD in progress: M. Sakho. Hyperstreaming Query answering on graphs. Since 2016. Supervised by Niehren and Boneva.  
 PhD in progress: J.M. Lozano. On data integration for mixed database formats. Supervised by Boneva and Staworko.

### **9.2.3. Juries**

P. Bourhis was a member of PhD committee for Antoine Amarilli (ParisTech)  
 S. Tison was a member of the PhD committees for Yoann Dufresne and A. Boiret and reviewer for the PhD of Carles Creus (Universitat Politecnica de Catalunya).  
 A. Lemay was a member of the PhD committee for A. Boiret  
 J. Niehren was a member of PhD committees for A. Boiret, T. Sebastian and Louis Gallaraga (ParisTech).

### **9.2.4. Internships**

A. Durey, University of Lille I. On Implemetation of a Shex validator, from Jun 2016 until Sep 2016. Supervisor I. Boneva.  
 R. Li, Ecole Centrale de Lille, from May 2016 until Aug 2016. On aggregate queries for data mining. Supervisors J. Niehren and P. Bourhis.

### **9.2.5. Selection Committies**

I. Boneva was member of the selection committee for an assistant professorship at the University of Lille I.  
 S. Tison was member of the selection committee for a professorship at the University of Rouen.

## **9.3. Popularization**

I. Boneva has supervised second year students from DUT while they conducted activities on introduction to programming to 9-10 years old students in Villeneuve d'Ascq.

## **9.4. Standardization**

I. Boneva is a member of the Data Shapes Working Group of the W3C which the mission is to produce a language for defining structural constraints on RDF graphs. <http://www.w3.org/2014/data-shapes/charter>

## MAGNET Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. Member of the Organizing Committees

AURÉLIEN BELLET co-organized the workshop Private Multi-Party Machine Learning @ NIPS 2016.<sup>0</sup>

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Chair of Conference Program Committees

PASCAL DENIS served as co-chair of the Polaris Colloquium, a monthly Guest Lecture series in Computer Science and Signal Processing, co-sponsored by Inria Lille–Nord Europe and University of Lille CRISAL Lab.

#### 10.1.2.2. Member of the Conference Program Committees

AURÉLIEN BELLET served as PC member for IJCAI 2016, ICML 2016, NIPS 2016 and AISTATS 2017.

PASCAL DENIS served as Senior PC member for IJCAI 2016. He was PC member for ACL 2016, AAI 2016, CAP 2016, EMNLP 2016, and NAACL 2016.

RÉMI GILLERON served as PC member for NIPS 2016 and AISTATS 2017.

JAN RAMON served as PC member for AISTATS 2016 and 2017, BAI workshop @ IJCAI 2017, iee big data 2016, BNAIC 2016, DS 2016, ECAI 2016, ECML-PKDD 2016, IEEE ICDM 2016, ICHI 2016, IJCAI 2016, ILP 2016, ISMIS 2017, KDD 2016, MLG 2016, NIPS 2016, PMPML workshop @ NIPS 2016, SSDM workshop @ ECML-PKDD 2016.

MARC TOMMASI served as PC member for NIPS 2016, ICML 2016, IJCAI 2016, EGC 2017.

FABIEN TORRE served as PC member for EGC 2017, workshop CluCo 2017, AAFD & SFC 2016, CNIA 2016

FABIO VITALE served as PC member for AISTATS 2017 and ECMLPKDD 2016, NIPS 2016.

#### 10.1.2.3. Reviewer

GÉRAUD LE FALHER was reviewer for ECMLPKDD 2016, NIPS 2016 and IJCAI 2016. MIKAELA KELLER was a reviewer for ICLR 2016 and ICML 2016.

### 10.1.3. Journal

#### 10.1.3.1. Member of the Editorial Boards

JAN RAMON is member of the editorial boards of data mining and knowledge discovery, machine learning and guest editorial board of ECML-PKDD 2016.

#### 10.1.3.2. Reviewer - Reviewing Activities

AURÉLIEN BELLET was reviewer for IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) and IEEE Transactions on Cybernetics (TCYB).

JAN RAMON: data mining and knowledge discovery (dami) 5; knowledge and information systems (kais): 4; machine learning :3; neurocomputing: 2; artificial intelligence: 2; plos one : 1

FABIO VITALE was reviewer for the journal EJOR (European Journal of Operational Research - Elsevier), and the journal Internet Mathematics.

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<sup>0</sup><https://pmpml.github.io/PMPML16/>

GÉRAUD LE FALHER was reviewer for the International Journal of E-Planning Research.

#### **10.1.4. Invited Talks**

AURÉLIEN BELLET was invited the Learning, Privacy, and Mobile Data Workshop at Google Research Seattle,<sup>0</sup> the Statistical Machine Learning (SMILE) seminar in Paris,<sup>0</sup> the Workshop on Distributed Machine Learning (Télécom ParisTech),<sup>0</sup> and at the company EURA NOVA.<sup>0</sup>

PASCAL DENIS was invited to the STL seminar, Université Lille 3 (February 2016).

#### **10.1.5. Scientific Expertise**

PASCAL DENIS was reviewer for Flanders Research Foundation (FWO, Belgium) and the Brussels Institute for Research and Innovation (Innoviris).

JAN RAMON was reviewer of H2020 projects.

#### **10.1.6. Research Administration**

FABIEN TORRE is in the board of the national evaluation committee for teaching and research in computer science (CNU 27)

## **10.2. Teaching - Supervision - Juries**

### **10.2.1. Teaching**

Licence MIASHS: FABIO VITALE, Introduction à l'algorithmique, 66h, L2, Université Lille 3.

Licence MIASHS: MARC TOMMASI, Réseaux, 28h, L1, Université Lille 3.

Licence MIASHS: RÉMI GILLERON, Traitement de données, 24h, L1, Université Lille 3.

Licence MIASHS: GÉRAUD LE FALHER, Traitement de données, 36h, L1, Université Lille 3.

Licence MIASHS: MATHIEU DEHOUCK et THIBAUT LIÉTARD, Projet informatique de traitement de données en SHS, 20h, L2, Université Lille 3.

Licence MIASHS: MIKAELA KELLER, Codage et représentation de l'information, 24h, L1, Université Lille 3.

Licence SoQ (SHS): FABIEN TORRE, Traitement de contenus textuels, 24h, L3, Université Lille 3.

Licence SoQ (SHS): RÉMI GILLERON, Algorithmique de graphes, 24h, L3, Université Lille 3.

Licence SHS: MIKAELA KELLER, Langages du Web, 24h, L3, Université Lille 3.

Licence SHS: MIKAELA KELLER, Représentation numérique de l'information, 24h, L3, Université Lille 3.

Licence économie gestion: RÉMI GILLERON, Traitement de données et documents, 24h, L1, Université Lille 3.

Licence MARC TOMMASI, MIKAELA KELLER C2i, université Lille 3.

Master MOCAD: PASCAL DENIS co-taught the Machine Learning and Decision under Uncertainty class, 37,5h, Université Lille 1.

Master MIASHS: RÉMI GILLERON et FABIEN TORRE, Web et référencement, 24h, M1, Université Lille 3.

Master MIASHS: GÉRAUD LE FALHER, Web et réseaux, 24h, M1, Université Lille 3.

Master MIASHS: MIKAELA KELLER, Programmation et bases de données, 24h, M1, Université Lille 3.

<sup>0</sup><https://sites.google.com/site/learningprivacymobiledata/>

<sup>0</sup><https://sites.google.com/site/smileinparis/>

<sup>0</sup><http://machinelearningforbigdata.telecom-paristech.fr/fr/article/workshop-friday-novembre-25-distributed-machine-learning>

<sup>0</sup><http://euranova.eu>

Master LTTAC: FABIEN TORRE, Algorithmique des textes – Javascript, 36h, M1, Université Lille 3.

Master ID: FABIEN TORRE, information structurée, 20h, M2, Université Lille 3.

Master ID: FABIEN TORRE, programmation Web, 20h, M2, Université Lille 3.

Master / Master Spécialisé Big Data: AURÉLIEN BELLET, Advanced Machine Learning, 25.5h, Télécom ParisTech.

Formation continue (Certificat d'Études Spécialisées Data Scientist): AURÉLIEN BELLET, Supervised Learning and Support Vector Machines, 10h, Télécom ParisTech.

Formation continue: AURÉLIEN BELLET, Graph Mining, 3h, Télécom ParisTech pour Allianz.

### **E-learning**

SPOC: MARC TOMMASI, RÉMI GILLERON and ALAIN PREUX: Culture numérique, 5 semesters at the bachelor level, Moodle, Lille 3 university, more than 7000 students.

Pedagogical resources: texts, videos, quizz and exercices available on <http://culturenumerique.univ-lille3.fr/>, creative commons.

## **10.2.2. Supervision**

PhD in progress: GÉRAUD LE FALHER, Machine Learning in Signed Graphs, Inria Lille – Nord Europe, since Oct. 2014, MARC TOMMASI, FABIO VITALE and CLAUDIO GENTILE (University of Insubria, Italy).

Phd in progress: DAVID CHATEL, Semi-supervised spectral clustering since Sep 2012, MARC TOMMASI and PASCAL DENIS.

Phd in progress: MATHIEU DEHOUCK, Graph-based Learning for Multi-lingual and Multi-domain Dependency Parsing, since Oct 2015, PASCAL DENIS and MARC TOMMASI.

Phd in progress: PAULINE WAUQUIER, Recommendation in Information Networks, since Dec 2013, MIKAELA KELLER and MARC TOMMASI.

Phd in progress: THIBAUT LIÉTARD, Adaptive Graph Learning with Applications to Natural Language Processing, AURÉLIEN BELLET, PASCAL DENIS and RÉMI GILLERON.

Master: THIBAUT LIÉTARD, Metric learning for Graph-based coreference resolution, ENS Rennes, co-supervised by AURÉLIEN BELLET and PASCAL DENIS.

Master: PAUL VANAESBROUCK, Decentralized Machine Learning on Graphs, Ecole Polytechnique, co-supervised by AURÉLIEN BELLET and MARC TOMMASI.

Master: PIERRE DELLENBACH, Private learning of heavily distributed data, Ecole Polytechnique, co-supervised by AURÉLIEN BELLET and JAN RAMON.

Master: ROBIN VOGEL, Learning to Rank Rare Instances, ENSAE, co-supervised by AURÉLIEN BELLET, STÉPHAN CLÉMENÇON et ANNE SABOURIN (Télécom ParisTech), et STÉPHANE GENTRIC (Morpho).

## **10.2.3. Juries**

- AURÉLIEN BELLET was member of the recruitment committee for MdC in Computer Science at Télécom Saint-Etienne.
- PASCAL DENIS et MARC TOMMASI were members of the recruitment committee for MdC in Computer Science at Université Lille 3.
- PASCAL DENIS was member of the Commission Emploi Recherche (CER) at Inria Lille – Nord Europe.
- RÉMI GILLERON was member of the PhD committees of HUGO LOUCHE (Examinateur) and TOM SEBASTIAN (Président).
- MARC TOMMASI was member of the habilitation committee of ALBERT BIFFET (Rapporteur).



- MARC TOMMASI was member of the PhD committees of GUILLAUME RABUSSEAU (Rapporteur), RAPHAËL PUGET (Rapporteur), MICHAËL PERROT (Examineur), HADRIEN GLAUDE (Examineur).
- MARC TOMMASI was head of the jury for the recruitment committee of Junior Research Scientists (CR1/CR2) at Inria Lille.

### **10.3. Popularization**

MARC TOMMASI presented the MAGNET team at the EuraTechnologies ICT innovation ecosystem (<https://www.inria.fr/centre/lille/agenda/r-dv-du-plateau-inria-apprentissage-automatique-et-reseaux-d-information>).

AURÉLIEN BELLET presented some of his work at the popularization seminar “30 minutes de sciences” and at an Assemblée Générale of Inria Lille - Nord Europe.

THIBAUT LIÉTARD has participated to the “chercheur itinérant” initiative (<https://www.inria.fr/centre/lille/recherche/sciences-pour-tous2/mediation/chercheurs-itinerants-au-lycee-2016>).

RÉMI GILLERON has participated at the forum “F O O R <: Forum Ouvert Oeuvres et Recherches” where he presented the research work done with PASCAL DENIS for the artwork “This is Major Tom to Ground Control”

## **ORPAILLEUR Project-Team**

# **9. Dissemination**

## **9.1. Promoting Scientific Activities**

### **9.1.1. Scientific Events Organization, General Chairs, Scientific Chairs**

- “FCA4AI 2016”. Amedeo Napoli organized with Sergei O. Kuznetsov (HSE Moscow) and Sebastian Rudolph (TU Dresden) the fifth workshop FCA4AI (“What can do FCA for Artificial Intelligence”) which was associated with the ECAI Conference in The Hague (Netherlands, August 2016, see <http://www.fca4ai.hse.ru/2016> and <http://ceur-ws.org/Vol-1703>) [53].

#### *9.1.1.1. Scientific Animation*

- The scientific animation in the Orpailleur team is based on the Team Seminar which is called the “Malotec” seminar (<http://malotec.loria.fr/?p=1>). The Malotec seminar is held in general twice a month and is used either for general presentations of members of the team or for invited presentations of external researchers.
- Members of the Orpailleur team are all involved, as members or as head persons, in various national research groups.
- The members of the Orpailleur team are involved in the organization of conferences and workshops, as members of conference program committees (ECAI, ECML-PKDD, ICCBR, ICDM, ICFCA, IJCAI, KDD...), as members of editorial boards, and finally in the organization of journal special issues.

## **9.2. Teaching – Supervision – Juries**

- The members of the Orpailleur team are involved in teaching at all levels of teaching, mainly at University of Lorraine. Actually, most of the members of the Orpailleur team are employed on “Université de Lorraine” positions.
- The members of the Orpailleur team are also involved in student supervision, at all university levels, from under-graduate until post-graduate students.
- Finally, the members of the Orpailleur team are involved in HDR and thesis defenses, being thesis referees or thesis committee members.

## SMIS Project-Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Scientific Events Organisation

#### 9.1.1.1. General Chair, Scientific Chair

- Philippe Pucheral: Co-founder of the bi-annual French Summer School 'Masses de Données Distribuées' and co-organizer of this school in 2016

#### 9.1.1.2. Member of the Organizing Committees

- Benjamin Nguyen: Steering committee of 'Atelier sur la Protection de la Vie Privée' (APVP) in 2016
- Nicolas Ancaux: co-organizer (with Fabrice Le Guel and Ulysse Roux) of the 'Journée de restitution d'ISN' in 2016

### 9.1.2. Scientific Events Selection

#### 9.1.2.1. Member of the Conference Program Committees

- Philippe Pucheral: DATA'16, DBKDA'16, BDA'16, EDBT'17
- Luc Bouganim: VLDB'17, EDBT'16, BDA'16 (Demo)
- Benjamin Nguyen: ECML/PKDD'16
- Nicolas Ancaux: SIGMOD'17, EDBT'16, DATA'16, ICT4AWE'16, BDA'16, RESSI'16
- Iulian Sandu Popa: IEEE MobileCloud'16, DATA'16, MobilWare'16, MCSMS'16

#### 9.1.2.2. Reviewer

- Luc Bouganim: EDBT'17
- Iulian Sandu Popa: MDM'16
- Guillaume Scerri : SIGMOD'17, EDBT'17, STACS'17

### 9.1.3. Journal

#### 9.1.3.1. Member of the Editorial Boards

- Nicolas Ancaux: Associate Editor of the VLDB Journal (since 2015)
- Benjamin Nguyen: Techniques et Sciences Informatiques (TSI) - Revue Française (Rédacteur adjoint, domaine Sécurité et Vie Privée depuis 2016-05)
- Luc Bouganim: Area Editor for PVLDB 2018

#### 9.1.3.2. Reviewer - Reviewing Activities

- Iulian Sandu Popa: IEEE TKDE, ACM Transactions on Storage, International Journal of Digital Earth

### 9.1.4. Invited Talks

- Invited tutorial: N. Ancaux, L. Bouganim, Tutorial: Decentralized Personal Data Management, using secure devices, BDA summer school: "Masses de données distribuées", Uruguay, June 2016 [28].
- Invited talk: N. Ancaux, La valorisation de la donnée par l'utilisateur : approche technique. Centre français de droit comparé, Colloque 'Propriété(s) et données', Paris, 2016 <https://linc.cnil.fr/fr/le-centre-francais-de-droit-compare-organise-un-colloque-proprietes-et-donnees>

- Invited talk: L. Bouganim, Remy Pasquion, A Secure and Mobile Platform for Experimental Economy, Multidisciplinary Research Seminar at Telecom Paris Tech, Paris, June 2016.
- Invited talk: N. Anciaux, Contrôler ses données personnelles par la décentralisation. Journée Protection de la vie privée : Nouveaux instruments techniques et juridiques, CNRS, November 2016. [http://www.univ-orleans.fr/lifo/evenements/CAPPRIS/?page\\_id=125](http://www.univ-orleans.fr/lifo/evenements/CAPPRIS/?page_id=125)
- Invited demonstration: L. Bouganim and R. Pasquion, Présentation d'une Plateforme de Questionnaires Respectueux de la Vie Privée, Sommet « Partenariat pour un Gouvernement ouvert », Agora numérique « Pour un Sénat ouvert », December, 8, 2016.
- Invited demonstrations: N. Anciaux, L. Bouganim and P. Tran Van, Partager et disposer de ses données en en gardant la maîtrise, trois démonstrations sur la base de PlugDB: Mobile Platform for Experimental Economy, Secure personal cloud (with Cozy Cloud), Personal Social-Medical Folder. Journée Protection de la vie privée : Nouveaux instruments techniques et juridiques, CNRS, November 2016. [http://www.univ-orleans.fr/lifo/evenements/CAPPRIS/?page\\_id=125](http://www.univ-orleans.fr/lifo/evenements/CAPPRIS/?page_id=125)
- Invited talk: Iulian Sandu Popa, Distributed Architectures for Privacy-Aware Mobile Participatory Sensing, BIS'16 Workshop, June 2016 <https://project.inria.fr/siliconvalley/bis2016-day-2-full-day-working-session-on-smart-cities/>
- Invited talk: N. Anciaux, A new approach for secure personal cloud, CITI Talk, Lyon, May 2016 <http://www.citi-lab.fr/2016/05/17/citi-talk-a-new-approach-for-secure-personal-cloud-by-nicolas-anciaux-on-26th-may/>
- Panel: Nicolas Anciaux, Enjeux et opportunités des modèles ouverts en santé, Paris Open Source Summit, 2016. Trackleader : Olivier de Fresnoye. Panelists : Nicolas Anciaux (Inria), Mobin Yasini(MD, MPH, PhD, mHealth Quality R&D Director), Stéphane Gigandet (Open Food Facts), Clémentine Langlois (Fongwama) <http://empoweringopeninnovation.org/enjeux-et-opportunités-des-modeles-ouverts-en-sante/>

### 9.1.5. Scientific Expertise

- N. Anciaux, P. Pucheral : scientific expertise on behalf of DGCCRF (Direction Générale de la Concurrence, de la Consommation et de la Répression des Fraudes) and of the European Council regarding the draft proposal of "Directive of the European Parliament and of the Council on certain aspects concerning contracts for the online and other distance sales of goods" regulating the payment of numeric goods and services by means of personal data
- Benjamin Nguyen: Natural Sciences and Engineering Research Council of Canada (NSERC), Research grants
- Benjamin Nguyen: Membre du comité d'éthique de TeraLab, du Groupe des Ecoles Nationales d'Economie et de Statistique (GENES) dont l'ENSAE.

### 9.1.6. Research Administration

- Philippe Pucheral: Member of the HDR committee of the STV doctoral school (UVSQ) since 2014
- Philippe Pucheral: Member of the steering committee of the ED STIC doctoral school of University Paris-Saclay, 'Data, Knowledge and Interactions' committee (about 250 PhD students) since 2014
- Philippe Pucheral: Representative of Inria in the 'Comité des Tutelles Formation' of Paris-Saclay University since 2016
- Philippe Pucheral: Member of the 'Commission de Sélection' of UVSQ and of the 'Commission des Appellations' of Télécom SudParis in 2016
- Luc Bouganim: Reviewer for the ANR programs (Evaluation committee CE23), 2016
- Luc Bouganim: Member of the 'Commission de Sélection' of the INSA CVL, 2016
- Nicolas Anciaux: Co-director of the 'Privacy and digital identity' WG at Digital Society Institute (DSI), until June 2016

- Nicolas Ancaux: Reviewer of the CHIST-ERA Call 2015 - SPTIoT
- Nicolas Ancaux: Member of the 'Commission de Sélection' of UVSQ, 2016
- Benjamin Nguyen: Director of LIFO (EA 4022) since July 2016
- Benjamin Nguyen: Responsible of CNRS privacy working group "Sécurité" since september 2016
- Benjamin Nguyen: Director of Digital Affairs (INSA CVL)
- Iulian Sandu Popa: Reviewer for the ANR programs (evaluation committee CE23), 2016
- Iulian Sandu Popa: Member of the 'Commission de Sélection' of the UVSQ, 2016

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

Master : Philippe Pucheral, co-director of the DataScale master (UPSay), courses in M1 and M2 at UVSQ and at ENSIIE

Master: Nicolas Ancaux, Courses on database internal mechanisms and database security, 80, in Master1 and Master2 (AFTI, Orsay) and in engineering school (ENSTA ParisTech, Telecom Paristech)

Master : Luc Bouganim, Bases de données, 24, niveau M2, CFA AFTI/UVSQ, France

Master : Luc Bouganim, Systèmes d'information Privacy by Design, 54, niveau M2, ENSIIE, INSA CVL, France

Master : Luc Bouganim, Sécurité des bases de données, 10, niveau M2, Télécom ParisTech, France

Licence : Iulian Sandu Popa, Initiation aux bases de données (niveau L2), Bases de données (niveau L3), 96, UVSQ, France

Master : Iulian Sandu Popa, Bases de données relationnelles (niveau M1), Gestion des données spatiotemporelles (niveau M2), Sécurité des bases de données (niveau M2), 96, UVSQ, France

Master : Benjamin Nguyen, Databases, IA, Security, 192, INSA CVL, France

Licence : Guillaume Scerri, Fondements de l'informatique, 36, niveau L1, UVSQ, France

Licence : Guillaume Scerri, Initiation aux bases de données, 43.5, niveau L2, UVSQ, France

Master : Guillaume Scerri, Bases de données, 30, niveau M1, UVSQ France

#### E-learning

MOOC created in 2016: "Villes intelligentes : défis technologiques et sociétaux", coordinated by V. Issarny and N. Mitton. N. Ancaux, S.Grumbach, V. Issarny, N. Mitton, C. Morin, A. Pathak, H. Rivano. Start date 25 Jan. 2016. In 2016, more than 8000 students have registered to follow the courses. A new edition is planned for 2017. <https://www.fun-mooc.fr/courses/inria/41009/session01/about>

MOOC created in 2016: Bases de données relationnelles : comprendre pour maîtriser (Serge Abiteboul, Benjamin Nguyen, Philippe Rigaux) <https://www.fun-mooc.fr/courses/inria/41008/session01/about>

### 9.2.2. Supervision

PhD: Athanasia Katsouraki, Sharing and Usage Control of Personal Information, UVSQ, September 2016, Luc Bouganim and Benjamin Nguyen

PhD: Saliha Lallali, A Secure Search Engine for the Personal Cloud, UVSQ, January 2016, Nicolas Ancaux, Philippe Pucheral, and Iulian Sandu Popa

PhD: Dai Hai Ton That, Efficient Management and Secure Sharing of Mobility Traces, UVSQ, January 2016, Iulian Sandu Popa and Karine Zeitouni

PhD in progress : Paul Tran Van, Partage de documents sécurisé dans le Cloud Personnel, October 2014, Nicolas Anciaux and Philippe Pucheral

PhD in progress : Axel Michel, Secure Distributed Computations, October 2015, Benjamin Nguyen and Philippe Pucheral

PhD in progress : Julien Loudet, Personal Queries on Personal Clouds, July 2016, Luc Bouganim and Iulian Sandu Popa

PhD in progress : Riad Ladjel, Secure Distributed Computation for the Personal Cloud, October 2016, Nicolas Anciaux and Philippe Pucheral

### **9.2.3. Juries**

Philippe Pucheral: member of the PhD jury of Mahsa Najafzadeh (Paris VI, 22/04/2016)

Benjamin Nguyen: reviewer of the PhD of Tarek SAYAH, Exposition sélective et problème de fuite d'inférence dans le Linked Data, Université Claude Bernard Lyon I, 2016/09/08

Benjamin Nguyen: reviewer of the PhD of Germain JOLLY, Evaluation of payment applications on smart cards, Université de Caen/ENSICAEN, 2016/07/08

Benjamin Nguyen: reviewer of the PhD of Julien LOLIVE, Entrelacement des mécanismes d'identification et de respect de la vie privée pour la protection des contenus externalisés, Télécom Bretagne, 2016/05/13

Benjamin Nguyen: president and reviewer of the PhD jury of Karina SOKOLOVA, Bridging the gap between Privacy by Design and mobile systems by patterns, Université Technologique de Troyes, 2016/04/27

## **9.3. Popularization**

General public (large audience magazines, television, videos):

- "Santé connectée. Une médecine sans médecin ?", interview of N. Anciaux, La Recherche, N°510 Avril 2016. (<http://fliphtml5.com/ggwf/ynja> p.84)
- "PlugDB, coffre-fort numérique personnel", interview of P.Pucheral, Le Monde Science & Techno, November 28th, 2016.
- "Sur Internet, vos données personnelles valent de l'or", interview of P.Pucheral, Ça m'intéresse, November 2016.
- "Santé connectée, santé partagée", interview of P.Pucheral, Le Point, April 7th 2016.

## TYREX Project-Team

# 8. Dissemination

## 8.1. Promoting Scientific Activities

### 8.1.1. Scientific Events Organisation

#### 8.1.1.1. Member of the Organizing Committees

- C. Roisin is a member of the steering committee of the [ACM Symposium on Document Engineering](#). (until Sept. 2016)

### 8.1.2. Scientific Events Selection

#### 8.1.2.1. Member of the Conference Program Committees

- P. Genevès has been external review committee member for the 21st ACM SIGPLAN International Conference on Functional Programming (ICFP'16).
- P. Genevès has been program committee member for the 16th ACM Symposium on Document Engineering (DocEng'16).
- C. Roisin has been program committee member for the 16th ACM Symposium on Document Engineering (DocEng'16).

#### 8.1.2.2. Reviewer

- P. Genevès has been a referee for the '32ème Conférence sur la Gestion de Données - Principes, Technologies et Applications' (BDA 2016)

### 8.1.3. Journal

#### 8.1.3.1. Reviewer - Reviewing Activities

- N. Gesbert has been a referee for Logical Methods in Computer Science (LMCS).
- C. Roisin has been a referee for Journal of Visual Languages & Computing, Elsevier (JVLC).

### 8.1.4. Leadership within the Scientific Community

- C. Roisin is member of the section 27 of the CNU (Conseil National des Universités).

### 8.1.5. Scientific Expertise

#### Oppidoc

Title: Choice of Methods and Algorithms for XQuery Static Analyses in the Oppidum Framework

Duration: November - December 2016

Coordinator: Pierre Genevès

Abstract: The Oppidoc startup develops 'Oppidum': an XQuery web application framework which simplifies the development of XML-REST-XQuery applications (XRX) with the full XML technology stack (XQuery, XSLT, native XML database). It relies on a RESTful approach and on a well defined application model using concepts (routes, conventions, pipelines) popularized in other frameworks such as Ruby On Rails, Orbeon Forms and more recently Express on nodejs. Our collaboration concerns a study about the introduction of advanced static analyses techniques in the Oppidum development process.

### 8.1.6. Research Administration

- P. Genevès is co-responsible of the doctoral school of Grenoble University for Computer Science (around 400 PhD students).
- P. Genevès is a permanent member of the committee in charge of hiring research engineers at Inria Grenoble - Rhône-Alpes research center.
- N. Layaïda is ‘réfèrent budget’ member of the budget commission of the Inria Grenoble – Rhône-Alpes research center. The role of this commission is to allocate yearly budget (‘dotation’) to Inria project teams and services. On a yearly basis, we meet with team and service leaders individually, collect their financial needs and set their budget.
- N. Layaïda is member of the Scientific Board of Advanced Data-mining of the Persyval Labex.
- N. Layaïda is member of the experts pool (selection committee) of the minalogic competitive cluster.
- N. Layaïda is a permanent member of the jury in charge of evaluation harmonisation of the Master of Science in Informatics at Grenoble.

## 8.2. Teaching - Supervision - Juries

### 8.2.1. Teaching

- Master : P. Genevès, ‘Semantic web: from XML to OWL’, 36 h, M2, Univ. Grenoble-Alpes
- Licence : N. Gesbert, ‘Logique pour l’informatique’, 45 h eq TD, L3, Grenoble INP
- Licence : N. Gesbert, ‘Bases de la programmation impérative’, 33 h eq TD, L3, Grenoble INP
- Licence : N. Gesbert, academic tutorship of an apprentice, 5 h eq TD, L3, Grenoble INP
- Master : N. Gesbert, ‘Fondements logiques pour l’informatique’, 12 h eq TD, M1, Grenoble INP
- Master : N. Gesbert, ‘Construction d’applications Web’, 22 h 30 eq TD, M1, Grenoble INP
- Master : N. Gesbert, ‘Analyse, conception et validation de logiciels’, 41 h 15 eq TD, M1, Grenoble INP
- Licence : C. Roisin, ‘Programmation C’, 12h eq TD, L2, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, ‘Architecture des réseaux’, 112h eq TD, L1, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, ‘Services réseaux’, 22h eq TD, L2, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, ‘Introduction système Linux’, 21h eq TD, L1, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, ‘Système et réseaux’, 14h eq TD, L3, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, academic tutorship of four apprentices, 20h eq TD, L3, IUT2, Univ. Grenoble-Alpes
- Licence : C. Roisin, academic tutorship of 18 students, 13h eq TD, L1, IUT2, Univ. Grenoble-Alpes
- N. Gesbert is responsible of the L3-level course ‘logique pour l’informatique’ (25 apprentices) and of the M1-level course ‘construction d’applications Web’ (72 students).
- P. Genevès is co-responsible of the Master-level course ‘Semantic Web: from XML to OWL’ in the Mosig, Univ. Grenoble Alpes.
- C. Roisin is responsible of the Licence Professionnelle en Alternance ‘Administration et Sécurité des Systèmes et des Réseaux’, L3, IUT2, Univ. Grenoble-Alpes (15 apprentices).
- C. Roisin is responsible of the L1-level course ‘Architecture des réseaux’ (150 students).

### 8.2.2. Supervision

- PhD : D. Graux, On the Efficient Distributed Evaluation of SPARQL Queries, Université Grenoble-Alpes, 15 December 2016, N. Layaïda and P. Genevès



PhD in progress : A. Abbas, Web query rewriting for heterogeneous data sources, since October 2014, N. Layaïda and P. Genevès

PhD in progress : T. Michel, Mobile Augmented Reality Applications for Smart Cities, since October 2014, P. Genevès, N. Layaïda and H. Fourati

PhD in progress : L. Jachiet, Reasoning with NoSQL Data Flows in Massively Parallel Systems, since October 2014, N. Layaïda and P. Genevès

### **8.2.3. Juries**

- C. Roisin has been referee and jury member of the Mira Sarkis PhD thesis, Telecom ParisTech (oct 2016).

## WIMMICS Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. General Chair, Scientific Chair

Valerio Basile: Area chair for Information Retrieval at CLiC-it 2016.

Elena Cabrio: Area chair (Semantics for applications). The Fifth Joint Conference on Lexical and Computational Semantics (\*SEM 2016).

Scientific co-chair. Dagstuhl Seminar on Natural Language Argumentation: Mining, Processing, and Reasoning over Textual Arguments, 2016.

Fabien Gandon: co-chair and organizer of the Q4APS (Question Answering And Activity Analysis in Participatory Sites) Workshop at WWW<sup>0</sup>.

Catherine Faron-Zucker: co-chair of the ESWC2016 workshop on Semantic Web for Scientific Heritage (SW4SH 2016),

co-chair of the first scientific day of the Inria Learning Lab, November 16th,

scientific chair of the Inria-Industry meeting (R2I) on Ed-Tech, December 1st.

Serena Villata: Chair together with Elena Cabrio, Graeme Hirst and Adam Wyner of the Dagstuhl Seminar on Mining, Processing, and Reasoning over Textual Arguments (Dagstuhl Seminar 16161), April 17-22, 2016. Local chair of the 29th International Conference on Legal Knowledge and Information Systems (JURIX 2016), December 14-16, 2016.

#### 10.1.1.2. Member of the Organizing Committees

Valerio Basile: local organizer for JURIX 2016 and for the SENTIPOLC challenge at EVALITA 2016.

Elena Cabrio: 6th Open Challenge on Question Answering over Linked Data (QALD-6), ESWC 2016.

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Chair of Conference Program Committees

Catherine Faron-Zucker: PC co-chair of the 22th Int. Conference on Conceptual Structures (ICCS 2016).

#### 10.1.2.2. Member of the Conference Program Committees

Valerio Basile: \*SEM, PEOPLES workshop at COLING, EACL 2017, WebNLG workshop at INLG, ESWC, EKAW, ICRA, CLiC-it, MIREL workshop at JURIX, DSAA, AIC workshop at BICA.

Michel Buffa: Web Audio Conference (WAC), ESWC, ISWC, WWW demo W3C track, Semantic Web Collaborative Spaces (SWCS) workshop.

Elena Cabrio: Association for Computational Linguistics conference (ACL, EACL), the Computational Linguistics conference (COLING), and the Extended Semantic Web Conference (ESWC).

Olivier Corby: Arima, EKAW, GraphQ, IC, ICCS, MoreBI, Top-K Shortest Path in Large Typed RDF Graphs Challenge at ESWC.

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<sup>0</sup><https://project.inria.fr/q4aps2016/>

Catherine Faron-Zucker: ESWC (European Semantic Web Conference), ISWC (Int. Semantic Web Conference, P&D), WebEd (WWW Workshop on Web Science and Technology for Education), Q4APS2016 (WWW Workshop on Question Answering And Activity Analysis in Participatory Sites), EKM (EKAW workshop on Educational Knowledge Management), ISW-LOD (Int. Workshop on Semantic Web and Linked Open Data), CNIA (Conf. Nationale d'Intelligence Artificielle), IC (Ingénierie des Connaissances), EGC 2017 (Extraction et Gestion des Connaissances).

Fabien Gandon: IJCAI , ISWC (Senior PC), WWW , WebScience (Senior PC), ESWC, FOIS, IC, Semantics, SemWeb.Pro, CNIA (Conférence Nationale en Intelligence Artificielle), Diversity-Aware AI Workshop at ECAI, EGC, Journée Intelligence Artificielle et Big Data <sup>0</sup>.

Alain Giboin is member of the steering committee of the COOP conference series (International Conferences on the Design of Cooperative Systems). He is also member of the program committee of: COOP, ESWC (In-use & Industrial Track), IC, SEMANTICS (Research Track), SEMANTICS (Posters and Demos), UBIMOB, WebSci.

Isabelle Mirbel: 27th International Conference on Advanced Information Systems Engineering (CAISE), IEEE Tenth International Conference on Research Challenges in Information Science.

Alexandre Monnin: WWW, ESWC, SWASH (ESWC workshop), WebSci, IC.

Oscar Rodríguez Rocha: KEOD, KSE

Andrea Tettamanzi: EGC 2017, ESWC, FLAIRS-29, FUZZ-IEEE, IC, LREC, MOD, PPSN, and SAC 2017 conferences, SW4SH workshop of ESWC.

Serena Villata: IJCAI, AAI, JURIX.

#### *10.1.2.3. Reviewer*

Olivier Corby: ESWC, ISWC, WWW, EGC.

Isabelle Mirbel: ESWC.

Alain Giboin: ISWC, WWW, IHM.

### **10.1.3. Journal**

#### *10.1.3.1. Member of the Editorial Boards*

Catherine Faron-Zucker: Revue d'Intelligence Artificielle, special issue "Ingénierie des Connaissances".

Fabien Gandon:

- Editor of the special issue of the Semantic Web Journal for best papers at ESWC 2015.
- Special issue RIA, Revue d'intelligence artificielle, Analyse intelligente des réseaux sociaux, volume 30, n. 4/2016.

Nhan Le Thanh: Journal of Science and Technology, Da Nang University- Issue on Information and Communications Technology.

Isabelle Mirbel: Ingénierie des Systèmes d'Information (Hermès).

#### *10.1.3.2. Reviewer - Reviewing Activities*

Valerio Basile: Language and Cognition (published by Cambridge University Press), Computer Speech & Language, Interacting with Computers.

Olivier Corby: Semantic Web Journal.

Catherine Faron-Zucker: Semantic Web Journal (SWJ), Journal of Web Science, ACM's Transactions on Internet Technology (TOIT), International Journal of Web Information Systems (IJWIS), International Journal of Metadata, Semantics and Ontologies (IJMSO).

<sup>0</sup><http://bigia2016.irisa.fr/>

Nhan Le Thanh: Journal of Science and Technology, Da Nang University- Issue on Information and Communications Technology.

Isabelle Mirbel: Neurocomp journal.

Alexandre Monnin: Minds and Machines, Big Data and Society, Revue d'intelligence artificielle.

Andrea Tettamanzi: Evolutionary Intelligence, Soft Computing (SOCO).

Serena Villata: Journal of Logic and Computation, Argument & Computation, Artificial Intelligence.

#### **10.1.4. Invited Talks**

Valerio Basile: University of Turin, Building a default knowledge base of objects (and other stories of robots), November 16th.

Michel Buffa:

WWW 2016 W3C Track: HTML5 games, When your browser becomes a game console! Coding games for the Web + Demo of a HTML5 game developed by students in the first session of the W3Cx HTML5 Part 2 MOOC.

Discussion on the future of Web games development using HTML5, special off-conference HTML5 gaming meetup (chair and co-organizer), WWW 2016 Conference, April 13, Montreal, Canada.

AmpSim2, un simulateur d'amplificateur de guitare en Web Audio, Paris Audio #3, September 7, IRCAM.

Michel Buffa, Thierry Bergeron: "Le projet AZKAR : navigation d'un robot mobile temps réel à travers le Web en P2P avec l'API WebRTC", Conférence Blend WebMix 2016, November 2 & 3, Lyon, France.

Elena Cabrio: Bielefeld University, Germany, "Argument mining: our story so far", June 20th.

Catherine Faron-Zucker: Invited research Talk, at the Ministry of Economy and Finance (MEF- DGE), September 23rd.

Fabien Gandon:

- Keynote speaker for the conference Web Intelligence, Mining and Semantics (WIMS 2016) titled "One Web of pages, One Web of peoples, One Web of Services, One Web of Data, One Web of Things... and with the Semantic Web bind them.", June 14th;
- Joint keynote speaker for the International Conference on Conceptual Structures (ICCS 2016) and International Conference on Formal Ontology in Information Systems (FOIS 2016) titled "On the many graphs of the Web and the interest of adding their missing links.", July 7th;
- CaféLecture - Atelier de lecture transdisciplinaire - Learning Centre SophiaTech, Regards Croisés. "Dans l'esprit du Pagerank : regards croisés sur les algorithmes".

Alain Giboin (with Agnès Festré, GREDEG) gave a talk on "Nudges, Affordances et conception d'artefacts" in "Regards croisés" Seminar at Sophia Antipolis Campus.

Alexandre Monnin:

National interLabex symposium "Excellence in Smart Systems" (Besançon), November 17th.

Roundtable as part of the Economique numérique summer school - 3EN (Nice), May 31st.

Master Miage to deliver a talk entitled "La philosophie à partir de l'architecture du Web" (Sophia Antipolis), March 9th.

Hypertopic seminar of Tech-Cico (UTT, Troyes, online presentation), March 21st.

Emilie Palagi:

A presentation in FORUM SPARKS seminar on the evaluation and design of the explanation features of the exploratory search system Discovery Hub, March 1st.

A presentation in Axis-2 of the "Maison des Sciences Humaines et Sociales (MSHS) du Sud-Est (Nice)" : "Exploratory search system and user centered evaluation method", March 14th.

A presentation of Palagi's PhD Subject in a new cycle of seminars on Human Computer Interaction (HCI) and UX Design called "les lundis de l'ergonomie", October 10th.

"Journée rencontre Inria Industrie" in Lille: A demo of Discovery Hub and the presentation of an ongoing work on the design of a user centered evaluation method of exploratory search systems, November 25th.

### 10.1.5. Leadership within the Scientific Community

Alexandre Monnin organizes a seminar with Lise Arena (UNS, GREDEG) and Bernard Conein (UNS, GREDEG), between Inria and MSHS, entitled "Digital artifacts and materialities". International researchers such as Jérôme Denis<sup>0</sup> (Mines ParisTech), Paul Smart (Southampton)<sup>0</sup>, Michael Wheeler (Stirling), David Kirsh (San Diego)<sup>0</sup>, Yuk Hui (Lüneburg)<sup>0</sup> and Brian Cantwell Smith (Toronto) participated in the seminar this year.

Alexandre Monnin and Manuel Boutet (UNS, GREDEG) organize the "ateliers de lecture transdisciplinaires" of UCA, hosted by SophiaTech learning centre and later redubbed "Regards croisés" (5 sessions took place, all organized by Alexandre Monnin, with Lise Arena and Fabien Gandon, Alexandre Monnin et Bernard Conein, Ali Douai et Gabriel Plassat, Nathalie Oriol and François Bremond, Alain Giboin and Agnès Festré). The regards croisés have been chosen to be recorded and archived on a future UCA portal and YouTube channel.

Alexandre Monnin participated to the invitation of Brian Cantwell Smith to a Morgenstern colloquium at Inria Sophia Antipolis, December 8th. Alexandre Monnin is extending Brian Cantwell Smith's stay for the Morgenstern Colloquium thanks to fundings provided by the MSHS. Two workshops will be organized around him on Dec. 12th and 13th at the MSHS in Nice in addition to the PhiloWeb day on the 14th.

Alexandre Monnin organized a PhiloWeb conference with B.C. Smith and Harry Halpin,

Alexandre Monnin participated in two events as part of the *Transition*<sup>2</sup> initiative set up by Inria and FING. In January, he created the W3C Community Group "Web We Can Afford" whose goal is to discuss the future of the Web at the time of the Anthropocene<sup>0</sup>.

"Les lundis de l'ergonomie" is a new cycle of seminars on Human Computer Interaction (HCI) and UX Design. Organized by Emilie Palagi and Louise Chaussade, this multidisciplinary series of talks may attract academic and professional profiles but also anyone interested in social science's approach to digital matters. Two presentations took place in October (with Emilie Palagi and Louise Chaussade) and December (Patrice Pena).

### 10.1.6. Scientific Expertise

Elena Cabrio was reviewer for French ANR projects.

Olivier Corby was reviewer for Atlantic 2020 (Pays de la Loire) project submission.

Catherine Faron-Zucker is the scientific reference of the Inria Learning Lab.

Catherine Faron-Zucker reviewed project proposals for the Academic Research Community (ARC) 6 of Rhône Alpes Region.

### 10.1.7. Research Administration

Michel Buffa is director of the MIAGE of Nice Sophia Antipolis, composed of Licence, Master 1 and four Master 2 diplomas with about 350 students<sup>0</sup>. He is member of the OpenMiage committee that aims at proposing an online version of the whole MIAGE cursus.

Olivier Corby is member of the PostDoc Inria Sophia committee.

<sup>0</sup><http://mshs.unice.fr/?p=6799>

<sup>0</sup><http://mshs.unice.fr/?p=6725>

<sup>0</sup><http://mshs.unice.fr/?p=6908>

<sup>0</sup><http://mshs.unice.fr/?p=7644>

<sup>0</sup><https://www.w3.org/community/wwca/>

<sup>0</sup><http://miage.unice.fr>

Catherine Faron-Zucker is General Treasurer of the French Society for Artificial Intelligence (AFIA).

She was member of the 2016 recruitment committee of Telecom Saint Etienne, University Jean Monnet.

She coordinates the Web option of the 5th year of Polytech Nice Sophia engineering school and is in charge of continuous training for the computer science department of Polytech Nice Sophia Antipolis.

Fabien Gandon is:

- representative of Inria at W3C consortium.
- representative of Inria in the Web Science Trust Network.
- member of the Steering Committee of the Scientific Board of Inria Sophia Antipolis (Bureau CP).
- member of the scientific committee of the Labex UCN.
- member of the Scientific Committee academy 1 of IDEX.
- member of the Steering Committee academy 5 of IDEX.
- member of ESWC Steering committee.
- member of IW3C2 Steering committee for WWW conference series.

Alain Giboin serves as scientific correspondent for Inria Sophia of COERLE (Inria Comité Opérationnel d'Evaluation des Risques Légaux et Ethiques), in tandem with the legal correspondent Nadège Camelio-Laurent. Alain Giboin is member of the Commission "Médiation et Animation des MATHématiques, des Sciences et Techniques Informatiques et des Communications" (MASTIC) of Inria Sophia Antipolis – Méditerranée.

Nhan Le Thanh is Animator of a multidisciplinary IDEX working group "Connected Healthcare and well Aging INnovative Services" (CHAINS) at UNS. He is animator of a multidisciplinary joint working group (TRT eHealth), UNS and Da Nang University, on the themes of IoT services for eHealth and smart city. He is coordinator of the bilateral scientific cooperation program NiceCampus between UNS and Da Nang University. He is director of the computer science department, IUT, UNS.

Isabelle Mirbel is Vice Dean of Science Department at University Nice-Sophia Antipolis.

Andrea Tettamanzi is coordinator of the 3rd year of the *Licence* in Business Informatics (MIAGE) at the UFR Science of the Université Nice Sophia Antipolis (UNS). He is co-animator, together with Johan Montagnat (I3S), of the SPARKS team who hosts Wimmics at I3S.

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

Licence: Amel Ben Othmane, Oracle Database, 64h, L1, IUT Institute of Technology of Nice, France.

Licence: Elena Cabrio, Web Server Programming, 45h, L1, UNS, France.

Licence: Amosse Edouard, Object Oriented Design, 33h, L3, UNS, France.

Licence: Amosse Edouard, Introduction to Web Programming, 16h, L3, UNS, France.

Licence: Catherine Faron-Zucker, Web languages, 36h, Licence 3, Polytech UNS.

Licence: Catherine Faron-Zucker, Statistics, 36h, Licence 3, Polytech UNS.

Licence: Nhan Le Thanh, Databases, 150h, DUT Info S2 at IUT, UNS, France.

Licence: Nhan Le Thanh, Advanced Databases, 105h, DUT Info S3 at IUT, UNS, France.

Licence: Nhan Le Thanh, Logical Data Models and languages, 24h, L3 LPSIL at IUT, UNS, France.

Licence: Nhan Le Thanh, Design and Development of DBMS services, 24h, L3 LPSIL at IUT, UNS, France.

Licence: Isabelle Mirbel, Databases, 58h, L3 MIAGE, UNS, France.

Licence: Isabelle Mirbel, Web programming (Persistence), 54h, L3 MIAGE, UNS, France.

- Licence: Alexandre Monnin, Analyse des controverses, 4h30, L1, Telecom ParisTech, France.
- Licence: Alexandre Monnin, Analyse des controverses and climate change, 6h, ESC Clermont-Ferrand, France.
- Licence: Andrea Tettamanzi, Algorithmique, Programmation Objet, Python, L2, 50h, UNS, France.
- Licence: Andrea Tettamanzi, Programmation Web Avancée coté client, L2, 39h, UNS, France.
- Licence: Andrea Tettamanzi, Web, 18h, L3 MIAGE, UNS, ETD;
- Master: Valerio Basile, Knowledge Engineering, 7h, Master 2 IFI, UNS, France.
- Master: Michel Buffa, Web technologies, 40h, M1, UNS, France.
- Master: Michel Buffa, Server Side JavaScript, 20h, M2 UNS, France.
- Master: Michel Buffa, Web 2.0/Web Services/HTML5, 40h, M2, UNS, France.
- Master: Michel Buffa, Java Certification, 25h, M2, Polytech'Nice UNS, France.
- Master: Michel Buffa, Programmable Web, 40h, M2, Polytech'Nice students, UNS, France.
- Master: Michel Buffa, Distributed Web development, 40h, M2, UNS, France. This course is also given by video conference to M2 students in Marroco, Madagascar and Haïti, that gets the same diploma as students from the UNS, France.
- Master: Elena Cabrio, Web Science, 5h, M2, UNS, France.
- Master: Olivier Corby, Oscar Rodríguez Rocha, Catherine Faron-Zucker, Fabien Gandon, Semantic Web, 45h, M2, UNS, France.
- Master: Olivier Corby, XML, 15H, M2, UNS, France.
- Master: Olivier Corby, Semantic Web, 3H, M2, University of Toulouse, France.
- Master: Olivier Corby, Semantic Web, 3H, M2, University of Montpellier, France.
- Master: Amosse Edouard, Development on the Android platform, 38h, M2, UNS, France.
- Master: Amosse Edouard, Web Services, 17h, M2, UNS, France.
- Master: Amosse Edouard, Introduction to Near Field Communication, 20h, M2, EMSI, Morocco.
- Master: Catherine Faron-Zucker, Web languages, 24h, M1, Polytech UNS.
- Master: Catherine Faron-Zucker, Web Science, 4h, M1 IFI, UNS.
- Master: Catherine Faron-Zucker, Network Programming, 12h, M1, Polytech UNS.
- Master: Catherine Faron-Zucker, XML technologies, 24h, M2 IMAFA, UNS.
- Master: Catherine Faron-Zucker, Semantic Web technologies, 28h, M2 IFI, Polytech, UNS.
- Master: Catherine Faron-Zucker, Knowledge Engineering, 9h, M2 IFI, Polytech, UNS.
- Master: Fabien Gandon, Web Science, 4h, M1 IFI, UNS.
- Master: Fabien Gandon, Semantic Web technologies, 4h, M2 IFI, Polytech, UNS.
- Master: Fabien Gandon, Semantic Web technologies, 25h, Data Science Technical Institute, Paris.
- Master: Alain Giboin, Human-Computer-Interaction Design and Evaluation, 54h, M2, UNS.
- Master: Alain Giboin, Interaction Techniques and Multimodality, 8h, M2, UNS.
- Master: Alain Giboin, Task and Activity Analysis for HCI design and evaluation, 6h, M2 Sociology and Ergonomics of Digital Technologies, UNS.
- Master: Alain Giboin, HCI Design and Evaluation, 10h, M2 Sociology and Ergonomics of Digital Technologies, UNS.
- Master : Alain Giboin, Economics and ICT: Ergonomics, 15h, M2 Economics and ICT, ISEM, UNS.
- Master: Isabelle Mirbel, Requirement Engineering, 42h Master MIAGE 1, UNS, France.
- Master: Isabelle Mirbel, Advanced databases, 48h Master MIAGE 1, UNS, France.
- Master: Alexandre Monnin, Ingénierie des connaissances, 11h, M2, UNS, France.

Master: Oscar Rodríguez Rocha, Ingénierie des connaissances, 12h, M2, UNS, France.

Master: Andrea Tettamanzi, Systèmes Distribués, 18h, M1 MIAGE, UNS, France.

Master: Andrea Tettamanzi, Concurrency and Parallelism, 18h, M1 International, UNS, France.

Master: Andrea Tettamanzi, Fuzzy Description Logics and Ontology Learning, in *Ingénierie des connaissances*, 10h, M2, Polytech'Nice, UNS, France.

### E-learning

MOOC: Fabien Gandon, Olivier Corby & Catherine Faron-Zucker, Introduction au Web Sémantique, 7 weeks, <https://www.fun-mooc.fr/>, Inria, France Université Numérique, Education for Adults, 4870 registered.

MOOC: Fabien Gandon, Olivier Corby & Catherine Faron-Zucker, Introduction to a Web of Linked Data, 4 weeks, <https://www.fun-mooc.fr/>, Inria, France Université Numérique, Education for Adults, 1703 registered.

MOOC: Michel Buffa, two MOOCs HTML5 for W3Cx / edX (MIT/Harvard). More than 300k registered students since 2015. Finalist for the first-ever edX Prize for Exceptional Contributions in Online Teaching and Learning (11 teachers have been selected among 2500 others and 1200 online courses).

#### 10.2.1.1. Internships

Mihai-Alexandru Dusmanu

Date: June – August

Institution: ENS Paris

Title: Argument Detection on Twitter

Supervisors: Elena Cabrio, Serena Villata

Safaa Rziou

Date: April – September

Title: Semantic Categorization of Segments of Ancient and Mediaeval Zoological Texts

Institution: Université Nice Sophia Antipolis, Master 2 MIAGE

Supervisors: Catherine Faron-Zucker, Andrea Tettamanzi

#### 10.2.2. Supervision

PhD: **Papa Fary Diallo**, *Co-Construction of Community Ontologies and Corpus in a Limited Technological Environment*, Inria, UNS, UGB, September 16th, Isabelle Mirbel, Olivier Corby, Moussa Lo.

PhD: **Zide Meng**, *Temporal and Semantic Analysis of Richly Typed Social Networks from User-Generated-Content Sites on the Web*, UNS, November 7th, Fabien Gandon, Catherine Faron-Zucker.

PhD in progress: **Amel Ben Othmane**, *Temporal and Semantic Analysis of Information Retrieved from Short and Spatio-Temporal Messages in Social Networks*, UNS, Nhan Le Than.

PhD in progress: **Chihabeddine Bouchenaki**, *Semantic Analysis of Activities in a Learning Environment*, UNS, September 2016, Fabien Gandon, Catherine Faron-Zucker.

PhD in progress: **Amosse Edouard**, *Studies of Spatial Semantic Aspect, Real Time Filtering Mechanisms and Semantic Enrichment of Short Messages on Dynamic Spatio-Temporal Social Networks*, UNS, Nhan Le Thanh and Elena Cabrio.

PhD in progress: **Raphaël Gazzotti**, *Conversational Agent Assistant Endowed with Natural Language and Intuition*, UNS & SynchroNext, Fabien Gandon, Catherine Faron-Zucker.

PhD in progress: **Franck Michel**, *Heterogeneous Databases Federation in Distributed Environment*, UNS, Johan Montagnat, Catherine Faron-Zucker.



PhD in progress: **Tran Duc Minh**, *Learning Ontologies from Linked Open Data*, Andrea Tettamanzi, UNS and Nguyen Thanh Binh, University of Danang.

PhD in progress: **Emilie Palagi**, *Design of a Model-based Method for Evaluating Exploratory Search Systems*, UNS, Labex UCN@Sophia, Alain Giboin, Fabien Gandon with Raphaël Troncy (Eurecom).

PhD in progress : **Tuan Anh Pham**, *Study and integration of the mechanism of workflow control in MVC (Model View Controller) architecture: design and implementation of an APM (Activity Process Management) platform for dynamic information systems on the networks*, UNS, Nhan Le Thanh.

### 10.2.3. Juries

Olivier Corby was jury member for the PhD Thesis of Géraud Fokou Pelap on *Conception d'un framework pour la relaxation des requêtes SPARQL*, November 21st, ENSMA, Poitiers.

Fabien Gandon was:

- President HDR Fabrice Huet entitled "From HPC to Big Data: Models and Tools for Large Scale Middleware", February 15th.
- Reviewer HDR Olivier Dameron entitled "Ontology-based methods for analyzing life science data", IRISA, Université de Rennes, January 11th.
- Reviewer PhD Thesis Andrei-Nicolae Ciortea entitled "Weaving a Social Web of Things: Enabling Autonomous and Flexible Interaction in the Internet of Things", École Nationale Supérieure des Mines de Saint-Étienne and University Politehnica of Bucarest, January 14th.
- Reviewer PhD Thesis Gabriela Montoya entitled "Answering SPARQL Queries using Views", LINA, Université de Nantes Angers Le Mans, March 3rd.
- Reviewer PhD Thesis Luis Redondo Garcia, "Semantically Capturing and Representing Contextualized News Stories on the Web", Eurecom, TELECOM ParisTech, March 4th.
- Jury member PhD Thesis Mazen Alsarem entitled "Semantic Snippets via Query-Biased Ranking of Linked Data Entities", Insa Lyon, University Lyon, Villeurbanne, May 5th.
- Jury member PhD Thesis Luis Galárraga entitled "Rule Mining in Knowledge Bases", TELECOM ParisTech, September 9th.

Nhan Le Thanh was jury member for the PhD of Nourhène Alaya, *Managing The Empirical Hardness of the Ontology*, Paris 8 University, October 13rd; Cheikh Hito Kacfeh Emani, *Formalisation automatique et sémantique de règles métier*, Lyon 1 University, December 1st.

Andrea Tettamanzi was reviewer for the PhD Thesis of Regina Ticona Herrera, *Towards RDF Normalization*, Université de Pau et des Pays de l'Adour, Anglet, July 6th.

He was President of the jury for the PhD Thesis of

Papa Fary Diallo, UNS, September 16th (see above); Romaric Pighetti, *Une méthode hybride pour la classification d'images à grain fin*, UNS, November 28th; Atheer Al-Najdi, *Une approche basée sur les motifs fermés pour résoudre le problème de clustering par consensus*, UNS, November 30th.

Alexandre Monnin was president of the jury of 11 Master thesis of graphic design students of ESAD Valence (Ecole supérieure d'art et de design), May. He was president of the "diplôme de fin d'études" of the same students of ESAD Valence, June.

## 10.3. Popularization

Catherine Faron-Zucker: Article on the Web of Data in the Interstices online journal of scientific culture <sup>0</sup>.

<sup>0</sup>[https://interstices.info/jcms/d\\_80071/le-web-de-donnees](https://interstices.info/jcms/d_80071/le-web-de-donnees)

Fabien Gandon:

- Les Révolutions de la Planète Web, Lycée Calmette, – Nice – April 26th.
- Retour d'expérience sur le Moot Web Sémantique, Journée Pédagogie innovante June 6th.
- SPARKS Day: How to supervise your supervisor?
- Meeting "Alumni" with students from Insa Rouen.

Alexandre Monnin: Café-in (June 2) : *Transition numérique et effondrement écologique : quel monde d'après ?*  
Stage Maths C2+ (June 16) : same presentation as above. Invitation by the FING to address the issues of "Small Science".

## ZENITH Project-Team

# 10. Dissemination

## 10.1. Scientific Animation

Editorial board of scientific journals:

- VLDB Journal: P. Valduriez.
- Journal of Transactions on Large Scale Data and Knowledge Centered Systems: R. Akbarinia and E. Pacitti are guest editors of a special issue on data management in internet of things (IoT).
- Distributed and Parallel Databases, Kluwer Academic Publishers: E. Pacitti, P. Valduriez.
- Internet and Databases: Web Information Systems, Kluwer Academic Publishers: P. Valduriez.
- Journal of Information and Data Management, Brazilian Computer Society Special Interest Group on Databases: P. Valduriez.
- Book series “Data Centric Systems and Applications” (Springer): P. Valduriez.
- Multimedia Tools and Applications: A. Joly.

Organization of conferences and workshops:

- Alexis Joly was the chair of the LifeCLEF 2016 international workshop<sup>0</sup> dedicated to multimedia biodiversity data management, Evora, sept. 2016
- Alexis Joly was in the organizing committee of the Floris’tic national workshop held in Montpellier, nov. 2016 (<http://floristic.org/8-nov-2016>)

Conference program committees :

- ACM SIGMOD Conf. 2016: R. Akbarinia, 2017: F. Masseglia
- IEEE Int. Conf. on Data Engineering (ICDE) 2016: R. Akbarinia, E. Pacitti, P. Valduriez (area chair)
- VLDB Joint Workshop on Big Data Open-Source Systems (BOSS) / Polyglot: P. Valduriez (co-chair)
- DataDiversityConvergence workshop, 6th International Conference on Cloud Computing and Services Science (CLOSER 2016): P. Valduriez (co-chair)
- Int. Conf. on Extending DataBase Technologies (EDBT), 2017: E. Pacitti
- 2nd Workshop on Big Data and Data Mining Challenges on IoT and Pervasive Systems (BigD2M), 2016: E. Pacitti
- International Conference and Labs of the Evaluation Forum (CLEF), 2016: A. Joly
- ACM International Conference on Multimedia Retrieval (ICMR), 2016: A. Joly
- IEEE International Conference on Image Processing (ICIP), 2016: A. Joly
- ACM Multimedia conference (ACMMM), 2016: A. Joly
- Int. work.Multimedia Analysis and Retrieval for Multimodal Interactions (MARMI): A. Joly
- Int. Conf. on Scientific and Statistical Database Management (SSDBM), 2016: A. Joly
- European Conf. on Computer Vision (ECCV), 2016: A. Joly
- VLDB 2017: F. Masseglia
- IEEE Int. Conf. on Data Mining, 2016: F. Masseglia
- ACM Symposium on Applied Computing 2017: F. Masseglia
- Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD) 2017: F. Masseglia
- IEEE Int. Conf. on Data Science and Advanced Analytics (DSAA), 2016: F. Masseglia
- Int. Symposium on Information Management and Big Data (SimBig), 2016: F. Masseglia
- Int. Conf. on Data Science, Technology and Applications (DATA), 2016: F. Masseglia

<sup>0</sup><http://www.imageclef.org/lifeclef/2016>

Reviewing in international journals :

- Distributed and Parallel Databases: R. Akbarinia
- ACM Transactions on Database Systems (TODS): A. Joly
- IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI): A. Joly
- IEEE Transactions on Knowledge and Data Engineering: R. Akbarinia
- Information Sciences: A. Joly
- Ecological Informatics: A. Joly
- Multimedia Tools and Applications Journal (MTAP): A. Joly
- Multimedia Systems: A. Joly
- Transactions on Information Forensics & Security: A. Joly
- International Journal of Computer Vision: A. Joly
- Transactions on Image Processing: A. Joly
- ACM Trans. on Database Systems: E. Pacitti
- Knowledge and Information Systems (KAIS): F. Masegla
- IEEE Transactions on Knowledge and Data Engineering (TKDE): F. Masegla

Other activities (national):

- Alexis Joly gave invited talks in national events: Inria scientific days (<https://journées-scientifiques2016.inria.fr/>), INRA-Inria days (<https://journées.inra.fr/maths-info2016>), Award ceremony of « La Recherche 2016 » (<http://www.leprixlarecherche.com/>).
- P. Valduriez is the scientific manager for the Latin America zone at Inria Direction des Relations Internationales (DRI), Member of the Scientific Committee at Agence Nationale de la Recherche (ANR) - Défi 7 Information and communication society and Member of the Scientific Committee of the BDA conference.
- F. Masegla gave an invited talk at the CNRS national seminar on IST about "Publication Data Analytics" (Meudon, 10 November), and an invited talk to the DSI service of IRD on "Scientific Data Mining" (Montpellier, 18 September). Florent also participates in the Class'Code PIA project dedicated to teaching computational thinking for professionals of education (head of the working group on the definition of fundamental notions).
- P. Valduriez gave invited talks at: "La Science des données à l'IRIT", Toulouse, april 2016, the Junior Conference on Data Science and Engineering, Paris Saclay, sept. 2016, the Orange Summer University "Innovate in IT", sept. 2016.

Other activities (international):

- Alexis Joly was a member of the scientific advisory board of the EU REVEAL project ( <http://revealproject.eu>). He was invited by the ATC innovation lab in Athens to participate in a workshop on social media verification (<http://revealproject.eu/reveal-workshop-on-16-sept-2016>).
- E. Pacitti gave an invited talk at the 6th workshop on big data and analytics (WOS6), co-organized by Technicolor and Inria (<http://www.bretagne-networking.org/wos6>) on Experiences on Data Management Techniques for Scientific Application in Rennes, nov. 2016, and a talk at Fundação Getulio Vargas on Experiences on Data Management Techniques for Big Data in Rio de Janeiro, dec. 2016.

## **10.2. Teaching - Supervision - Juries**

### **10.2.1. Teaching**

Most permanent members of Zenith teach at the Licence and Master degree levels at UM2.

Reza Akbarinia:

Master Research: New approaches for data storage, 9h, level M2, Faculty of Science, UM

Florent Masegla:

Science Popularization: 4 Ph.D students, from 3 different doctoral schools are having a 30h doctoral module under Florent Masegla's supervision.

Esther Pacitti:

IG3: Database design, physical organization, 54h, level L3, Polytech' Montpellier, UM2

IG4: Networks, 42h, level M1, Polytech' Montpellier, UM2

IG4: Object-relational databases, 32h, level M1, Polytech' Montpellier, UM2

IG5: Distributed systems, virtualization, 27h, level M2, Polytech' Montpellier, UM2

Industry internship committee, 50h, level M2, Polytech' Montpellier

Patrick Valduriez:

Professional: Distributed Information Systems, Big Data Architectures, 75h, level M2, Capgemini Institut

Professional: XML, 10h, level M2, Orsys Formation

Alexis Joly:

Master Research: Large-scale Content-based Visual Information Retrieval, 3h, level M2, Faculty of Science, UM

### **10.2.2. Supervision**

- PhD: Ji Liu, Multisite Management of Scientific Workflows in the Cloud, Univ. Montpellier, 3 Nov 2016, Advisors: Esther Pacitti and Patrick Valduriez
- PhD: Valentin Leveau, Spatially Consistent Nearest Neighbor Representations for Fine-Grained Classification, Univ. Montpellier, 9 Nov 2016, Advisor: Patrick Valduriez, co-advisor: Alexis Joly and Olivier Buisson
- PhD : Saber Salah, Optimizing a Cloud for Data Mining Primitives, Univ. Montpellier, 20 Apr 2016 Advisor: Florent Masegla, co-advisor: Reza Akbarinia
- PhD in progress: Christophe Botella, Large-scale Species Distribution Modelling based on crowdsourced image streams, started Oct 2016, Univ. Montpellier, Alexis Joly, François Munoz (IRD), Pascal Monestiez (INRA)
- PhD in progress: Titouan Lorieul, Pro-active crowdsourcing, started Oct 2016, Univ. Montpellier, Advisor: Alexis Joly
- PhD in progress: Mehdi Zitouni Closed Pattern Mining in a Massively Distributed Environment started sept. 2014, Univ. Tunis, Advisor: Florent Masegla, co-advisor: Reza Akbarinia
- PhD in progress : Djamel-Edine Yagoubi, Indexing Time Series in a Massively Distributed Environment, started oct. 2014, Univ. Montpellier, Advisors: Florent Masegla and Patrick Valduriez, co-advisor: Reza Akbarinia
- PhD in progress : Sakina Mahboubi, Privacy Preserving Query Processing in Clouds, started oct. 2015, Univ. Montpellier, Advisor: Patrick Valduriez, co-advisor: Reza Akbarinia
- PhD in progress: Khadidja Meguelati, Massively Distributed Clustering, started Oct 2016, Univ. Montpellier, Advisor: Florent Masegla, co-advisor : Nadine Hilgert (INRA)

### **10.2.3. Juries**

Members of the team participated to the following PhD committees:

- A. Joly: Zongyuan Ge (Queensland University of Technology), Amel Tuama Alhussainy (Univ. of Montpellier)
- E. Pacitti: Saliha Lallali (UVSQ), Nupur Mittal (Univ. Rennes 1)
- P. Valduriez: Damien Graux (Univ. Grenoble)
- F. Masegla: Hadi Hashem (Telecom SudParis), Manuel Pozo (CNAM), Martin Kirchgessner (Univ. Grenoble)

## 10.3. Popularization

F. Masegla is now “Chargé de mission pour la médiation scientifique Inria” and heads Inria’s national network of colleagues involved in science popularization.

Zenith has major contributions to science popularization, as follows.

### 10.3.1. Code Teaching for Kids

Teaching code is now officially in the school programs in France. Class’Code is a PIA project that aims at training the needed 300,000 teachers and professionals of education France. The project is a hybrid MOOC (both online courses and physical meetings).

Along with Class’Code, the association “La main à la pâte” has coordinated the writing of a school book on the teaching of computer science teaching, with Inria (Gilles Dowek, Pierre-Yves Oudeyer, Florent Masegla and Didier Roy), France-IOI and the University of Lorraine. The book has been requested by and distributed to 15,000 readers in less than one month.

F. Masegla is giving a doctoral training at different doctoral schools in Montpellier, in order to train facilitators for helping teachers and people of the education world to better understand the “computational thinking”. So far, 12 people have been trained. He is also a member of the management board of “Les Petits Débrouillards” in Languedoc-Roussillon and the scientific responsible for school visits in the LIRMM laboratory.

### 10.3.2. Science Outreach

In the context of the Floris’tic project, A. Joly participates regularly to the set up of popularization, educational and citizen science actions in France (with schools, cities, parks, etc.). The softwares developed within the project (PI@ntNet, Smart’Flore and ThePlantGame) are used in a growing number of formal educational programs and informal educational actions of individual teachers. For instance, Smart’Flore is used by the French National Education in a program for reducing early school leaving. PI@ntNet app is used in the Reunion island in an educational action called Vegetal riddle organized by the Center for cooperation at school. It is also planned to be used in a large-scale program in the Czech republic that is being finalized (in 40 classrooms). An impact study of the PI@ntNet application did show that 6% of the respondents use it for educational purposes in the context of their professional activity. The Inria movie “PI@ntNet, the application that helps people identify plants” enjoyed about 350 thousand views on Youtube.

### 10.3.3. Events

Zenith participated to the following events:

- F. Masegla co-organized and co-animated the Inria’s stand at “La fête de la science”, Montpellier, held by Genopolys (a science village).
- F. Masegla is member of the project selection committee for “La fête de la science” in Montpellier.
- M. Servajean and A. Joly animated a stand at “La fête de la science”, Montpellier, held by the LIRMM laboratory.
- A. Joly and J. Champ participated to the set-up of a PI@ntNet demo within the French pavillon at the Universal Exposition hold in Milan (about 2M visitors on the French pavillon).
- As a member of the organizing committee of the Floris’tic project, A. Joly participated to several popularization and educational actions in collaboration with Tela Botanica NGO (cities, parks, schools, etc.).
- P. Valduriez published an article in Interstices on “the data in question” [58].

## ALICE Project-Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Scientific Events Organisation

#### 9.1.1.1. General Chair, Scientific Chair

Sylvain Lefebvre is program co-chair for SMI 2017.

#### 9.1.1.2. Member of the Organizing Committees

Bruno Lévy was conference co-chair of GMP 2016.

### 9.1.2. Scientific Events Selection

#### 9.1.2.1. Chair of Conference Program Committees

Bruno Lévy was member of the program committee of ACM/EG Symposium on Geometry Processing, Pacific Graphic, Shape Modeling International

#### 9.1.2.2. Member of the Conference Program Committees

Sylvain Lefebvre was member of the SIGGRAPH 2016 program committee, and is a member of the EUROGRAPHICS 2017 program committee.

#### 9.1.2.3. Reviewer

- Jonas Martinez: Eurographics'16 Short papers.
- N. Ray: SIGGRAPH, SIGGRAPH ASIA, eurographics

### 9.1.3. Journal

#### 9.1.3.1. Member of the Editorial Boards

Sylvain Lefebvre is associate editor for ACM TOG. Bruno Lévy is associate editor of ACM Transactions on Graphics, The Visual Computer and Graphical Models

#### 9.1.3.2. Reviewer - Reviewing Activities

- D. Sokolov: Computer Graphics Forum, The Visual Computer
- N. Ray: ACM TOG, TVCG, Electronics Letters
- Dobrina Boltcheva : International Journal of Discrete & Computational Geometry
- Jonas Martinez: Computers & Graphics journal.
- Laurent Alonso: Graphs and Combinatorics, Discrete Applied Mathematics, ACM Translation of Algorithms, ESA 2016, LATIN 2016

### 9.1.4. Invited Talks

- Dmitry Sokolov: "Towards hexahedral meshes" Numerical geometry, grid generation and scientific computing NUMGRID 2016, Moscow
- Sylvain Lefebvre: Computer Graphics lab of Aachen, led by Pr. Leif Kobbelt
- Sylvain Lefebvre: IST Austria, visiting Pr. Bernt Bickel
- Sylvain Lefebvre: invited at CNR Imati (Genova, Italy) for a week to present his work and collaborate on a joint survey paper submitted to EUROGRAPHICS 2017.

### 9.1.5. Scientific Expertise

Bruno Lévy evaluated projects for the ANR, for the European Research Council.

### 9.1.6. Research Administration

Samuel Hornus was moderator of the CDT (Commission for Technological Development) of Inria nancy.

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

Licence : Enseignant, titre du cours, nombre d'heures en équivalent TD, niveau (L1, L2, L3), université, pays

Licence : Cédric Zanni, Informatique 1, 20h ETD, L3, École des Mines de Nancy, France

Licence: Dobrina Boltcheva, Licence Pro ISN, Computer Graphics 20h, Image Processing 20h, IUT Saint-Dié-des-Vosges

License: Dobrina Boltcheva, 2A DUT INFO, Advanced Java Programming 100h, IUT Saint-Dié-des-Vosges

License: Dobrina Boltcheva, 1A DUT INFO, Programming 60h, IUT Saint-Dié-des-Vosges

Licence : Dmitry Sokolov, Informatique graphique, 55h ETD, L1, Université de Lorraine, France

Licence : Dmitry Sokolov, Programmation Avancée, 40h ETD, L2, Université de Lorraine, France

Licence : Dmitry Sokolov, Logique, 20h ETD, L3, Université de Lorraine, France

Licence : Dmitry Sokolov, Introduction à la robotique mobile, 30h ETD, L2, Université de Lorraine, France

License : Samuel Hornus, Mathématiques Appliquées pour l'Informatique, 32 h ETD, L3, Télécom Nancy

Master : N. Ray, communication, 10h equivalent TD, M1, Université de Lorraine, France

Master :Cédric Zanni, Software Engineering, 19h ETD, M1, École des Mines de Nancy, France

Master :Cédric Zanni, Operating System, 14h ETD, M1, École des Mines de Nancy, France

Master :Cédric Zanni, Modèles et simulations d'instrument de musique, 9h ETD, M1, École des Mines de Nancy, France

Master :Dmitry Sokolov, Optimisation Combinatoire, 30h ETD, M1, Université de Lorraine, France

Master :Dmitry Sokolov, Infographie, 30h ETD, M1, Université de Lorraine, France

Master :Dmitry Sokolov, Algorithmique et programmation, 45h ETD, M1, Université de Lorraine, France

Master :Dmitry Sokolov, Algorithmique et Programmation Avancée, 60h ETD, M2, Université de Lorraine, France

Master, Sylvain Lefebvre, Programmation pour le jeux vidéo, 30h ETD, Ecole des Mines de Nancy, France.

Master, Sylvain Lefebvre, Introduction au parallélisme et au graphisme, 9h ETD, ENSG Nancy, France.

Master, Sylvain Lefebvre, Introduction à la fabrication additive, 9h ETD, ENSEM Nancy, France.

Master, Sylvain Lefebvre, Synthèse procédurale pour le design, 9h ETD, ENSAD, Nancy, France.

#### E-learning

Pedagogical resources **tinyRender**: Dmitry Sokolov, Computer graphics course. Short series of lectures on what is under the hood of OpenGL/DirectX. The course is already adopted in several universities throughout the world, and is now included in the distribution of Bullet physics library. Microsoft includes its C# port in the distribution of Xamarin Workbooks .

### 9.2.2. Supervision

HdR : Dmitry Sokolov, *Modélisation géométrique*, Université de Lorraine, 10 juin 2016



PhD thesis submitted, defense 01/02/2017 : Jean Hergel, *Modeling under Fabrication Constraints*, Oct. 2013, supervised by Sylvain Lefebvre

PhD thesis submitted, defense 03/02/2017 : Jérémie Dumas, *By-example shape synthesis for Fabrication*, Sept. 2013, supervised by Sylvain Lefebvre

PhD in progress : Maxence Reberol, *Finite elements for non-conformal mixed hexahedral-tetrahedral meshes*, Janvier 2015, co-supervised by Bruno Lévy and Sylvain Lefebvre

### **9.2.3. Juries**

Dobrina Boltcheva was a member of the recruitment committee for an associate professor position (maître de conférence) at the University of Poitiers (MCF 27 - XLIM/IRIAF).

Sylvain Lefebvre was a member of the CR2 recruitment jury for Inria Nancy Grand-Est. He was reviewer ('rapporteur') for the PhD defense of Hugo Loi (Université de Grenoble).

## **9.3. Popularization**

Sylvain Lefebvre participated in the 2016 science festival (stand and general public conference), and gave a presentation in front of an industrial public in an event organized by Fondation Charles Hermite.

## **AVIZ Project-Team**

# **9. Dissemination**

## **9.1. Promoting Scientific Activities**

### **9.1.1. Scientific Events Organisation**

#### *9.1.1.1. Member of the Organizing Committees*

- Jean-Daniel Fekete co-organizing the LIVVIL 2016 workshop on “Logging Visualization and Visualizing Logs” at IEEE VIS.
- Jean-Daniel Fekete served on the best paper committee for EuroVis 2016
- Pierre Dragicevic was Doctoral Colloquium co-chair at IEEE VIS 2016.
- Petra Isenberg co-organized the Beliv 2016 workshop on “Beyond Time and Error: Novel Evaluation Techniques for Visualization” at IEEE VIS.
- Petra Isenberg served as Posters co-chair for VIS 2016
- Petra Isenberg served on the best short-paper committee for EuroVis 2016
- Tobias Isenberg was posters co-chair for EuroVis 2016.
- Tobias Isenberg was visualization area co-chair for ISVC 2016.

### **9.1.2. Scientific Events Selection**

#### *9.1.2.1. Member of the Conference Program Committees*

- Jean-Daniel Fekete was a member of the program committees for Graph Drawing 2016
- Jean-Daniel Fekete was a member of the program committees for EuroVis 2016
- Jean-Daniel Fekete was a member of the program committees for ACM AVI 2016
- Pierre Dragicevic was a member of the program committee for VIS 2016.
- Pierre Dragicevic was a member of the program committee for CHI 2017.
- Petra Isenberg was a member of the program committee for CHI 2016.
- Petra Isenberg was a member of the program committee for Beliv 2016.
- Petra Isenberg was a member of the program committee for EuroVA 2016.
- Petra Isenberg was a member of the program committee for InfoVis 2016.
- Tobias Isenberg was a member of the program committee for IEEE SciVis 2016.
- Tobias Isenberg was a member of the program committee for IEEE VISAP 2016.
- Tobias Isenberg was a member of the program committee for Expressive 2016.
- Tobias Isenberg was a member of the program committee for IEEE 3DUI 2016.
- Pascal Goffin was a member of the program committee for 9. Forum Medientechnik 2016.

#### *9.1.2.2. Reviewer*

- Jean-Daniel Fekete: VIS, CHI
- Pierre Dragicevic: VIS, UIST, IHM
- Petra Isenberg: EuroVA, EuroVis, InfoVis, Nordic Forum for Human-Computer Interaction Research (NordiCHI), UIST Beliv (Workshop), DFG (Funding Agency)
- Tobias Isenberg: 3DUI, CHI, EuroVis, Expressive, ISS, PacificVis, SciVis, VISAP
- Christoph Kinkeldey: CHI
- Lonni Besancon: CHI EA, ISMI, SUI, CHI

- Mathieu Le Goc: CHI

### 9.1.3. Journal

#### 9.1.3.1. Member of the Editorial Boards

- Tobias Isenberg is associate editor of Elsevier Computers & Graphics.
- Petra Isenberg and Tobias Isenberg were guest editors of a special issue of Sage Publishing's Information Visualization on visualization evaluation.

#### 9.1.3.2. Reviewer - Reviewing Activities

- Petra Isenberg: Big Data Journal, CG&A, Journal of Graph Algorithms and Applications (JGAA), Information Visualization Journal (IVS), TVCG
- Tobias Isenberg: C&G, IV, TVCG
- Christoph Kinkeldey: JoEP (Journal of Economic Psychology), IJGI (ISPRS International Journal of Geo-Information), CP (Cartographic Perspectives), CaGIS (Cartography and Geographic Information Science)

### 9.1.4. Invited Talks

- Jean-Daniel Fekete: Bilan du programme ANR Kinsources, Paris, "Visualisation de réseaux dynamiques", July 8th, 2016
- Jean-Daniel Fekete: 2nd European Conference on Social Networks (EUSN), Paris, "Challenges in Social Network Visualization: Bigger, Dynamic, Multivariate.", June 16th, 2016
- Jean-Daniel Fekete: School in Geomatics (GIS), Lyon, "DataVis and InfoVis", May 31th, 2016.
- Jean-Daniel Fekete: Invited Talk, Aarhus University, "ProgressiVis: a New Workflow Model for Scalability in Information Visualization", Apr 20, 2016
- Jean-Daniel Fekete: Invited Talk, Inria Lille, "ProgressiVis: a New Workflow Model for Scalability in Information Visualization", Apr 15, 2016
- Pierre Dragicevic: "Bad Stats are Miscommunicated Stats". Invited talk at RWTH Aachen, 5 Feb 2016.
- Pierre Dragicevic: "Statistical Dances: Why No Statistical Analysis is Reliable and What To Do About It". Keynote talk at the BioVis 2016 symposium, 23 Oct 2016.
- Tobias Isenberg: "Tactile Navigation and Selection for 3D Data Exploration". University of Granada, Spain, May 25, 2016.
- Christoph Kinkeldey: "Challenges in Visually-Supported Reasoning with Uncertainty". VIA group, Telecom ParisTech, 23 June 2016.

### 9.1.5. Leadership within the Scientific Community

- Jean-Daniel Fekete is the chair of the Steering Community of the IEEE Information Visualization conference.
- Jean-Daniel Fekete is a member of the Visualization Steering Committee for the IEEE VIS conference
- Jean-Daniel Fekete is a member of the Steering Community of the EuroVis conference.
- Jean-Daniel Fekete is a member of the publication board of Eurographics.
- Tobias Isenberg is a member of the Steering Committee of the Expressive conference.
- Tobias Isenberg is a member of the Executive Committee of the Visualization and Computer Graphics Technical Committee of the IEEE Computer Society.

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

- “Visual Analytics” taught by Jean-Daniel Fekete at Ecole Centrale Paris, France
- “Block Course Visual Analytics” taught by Petra Isenberg at the University of Dresden, Germany
- “Visual Analytics” taught by Petra Isenberg at Ecole Centrale Paris, France
- “Introduction to Human-Computer Interaction” taught by Petra Isenberg at Ecole Centrale Paris, France
- “Information Visualization” co-taught by Petra Isenberg at Université Paris Sud
- “Non-Photorealistic Rendering” taught by Tobias Isenberg at the University of Granada, Spain
- “Introduction to Computer Graphics” taught by Tobias Isenberg at Polytech Paris-Sud
- “Photorealistic Rendering” taught by Tobias Isenberg at Polytech Paris-Sud and Université Paris-Saclay

### 9.2.2. Supervision

PhD: Evanthia Dimara, Information Visualization for Decision Making, Université Paris-Sud, 2014, Pierre Dragicevic and Anastasia Bezerianos

PhD: Mathieu Le Goc, Supporting Versatility in Tangible User Interfaces Using Collections of Small Actuated Objects, Université Paris-Sud, Defense date 15 Dec 2016, Pierre Dragicevic and Jean-Daniel Fekete

PhD: Pascal Goffin, From Individual to Collaborative Work, Université Paris-Sud, defended October 2016, Petra Isenberg and Jean-Daniel Fekete

PhD: Lonni Besançon, An Interaction Continuum for Scientific Visualization, Université Paris-Sud, 2014, Tobias Isenberg

### 9.2.3. Juries

- Jean-Daniel Fekete: Julien Tierny, HdR (Tenure) "Contributions à l'Analyse Topologique de Données pour la Visualisation Scientifique" , LIP6, Paris, Apr 29, 2016.
- Jean-Daniel Fekete: Matthias Nielsen, "Interactive Visual Analytics of Big Data A Web-Based Approach", Aarhus, Denmark, Apr 20, 2016
- Jean-Daniel Fekete: Mi-term PhD evaluation committee of Lobo María-Jesús, Saclay, May 2016.
- Jean-Daniel Fekete: Hiring Committee, Univ. Toulouse 1, France
- Pierre Dragicevic: Commission Scientifique Inria Saclay
- Pierre Dragicevic: PhD committee of Chat Wacharamanatham: Input Accuracy for Touch Surfaces. RWTH Aachen University, defended 5 February 2016.
- Pierre Dragicevic: Mi-term PhD evaluation committee of Nolwenn Maudet. 8 Sep 2016.
- Pierre Dragicevic: Mi-term PhD evaluation committee of Rafael Morales. 26 May 2016.
- Pierre Dragicevic: Post-doctoral assessment committee, project “Shareable Dynamic Media in Design and Knowledge Work”, Aarhus University. Nov 2016.
- Petra Isenberg: Jury CR2 Inria Saclay

## 9.3. Popularization

- Pierre Dragicevic and Yvonne Jansen: the [Curated List of Physical Visualizations](#) is continuously being updated.
- Elsa Ferreira’s interview with Mathieu Le Goc, [Zooids: mais qui sont ces robots mignons?](#), Makery Magazine, 26 Nov 2016.
- Stéphanie Dupont’s interview with Mathieu Le Goc, Jean-Daniel Fekete and Pierre Dragicevic: [Nouvelle interface homme-machine: des mini robots pour l’affichage et l’interaction](#). 26 Oct 2016.
- Petra Isenberg, Tobias Isenberg, and collaborators published an open dataset of IEEE VIS publications at <http://vispubdata.org>
- Petra Isenberg, Tobias Isenberg, and collaborators published an online tool to explore keywords of the IEEE Visualization conference at <http://keyvis.org>
- Pascal Goffin: “Enrichir le mot écrit – Intégrer texte et données avec les Word-Scale Visualizations (visualisations mots)”. EnsadLab/Spatial Media/Hist3D Colloquium: Les images du numérique. Histoires et futurs des images produites par ordinateur. Paris, France, 21 Mar 2016.
- Mathieu Le Goc and Zooids co-authors: [Material for Zooids](#).

## EX-SITU Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. Member of the Organizing Committees

- IHM 2016, *Conférence Francophone d'Interaction Homme-Machine*, Doctoral Consortium Co-Chair: Michel Beaudouin-Lafon, Jury: Wendy Mackay

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Chair of Conference Program Committees

- NIME 2016, *New Interfaces for Musical Expression*, Conference Workshop Chair: Joseph Malloch
- ACM/CHI 2016, *Music and HCI*, Conference Workshop Co-Organisers: Wendy Mackay, Joseph Malloch
- ACM/CHI 2016, *Human-Centred Machine Learning*, Conference Workshop Co-Organiser: Wendy Mackay
- ERC CREATIV Workshop *CREATIV*, Conference Workshop Organiser: Wendy Mackay
- MOCO 2016, *International Symposium on Movement and Computing*, Conference Steering Committee member: Sarah Fdili Alaoui

#### 10.1.2.2. Member of the Conference Program Committees

- IEEE VR 2016, *Virtual Reality Conference*: Cédric Fleury
- GI 2016, *Graphics Interface Conference*: Cédric Fleury
- GRAPP 2016, *Conference on Computer Graphics Theory and Applications*: Cédric Fleury
- 3DCVE 2016, *IEEE VR Workshop on Collaborative Virtual Environments*: Cédric Fleury
- CHI 2017, *ACM CHI Conference on Human Factors in Computing Systems*: Michel Beaudouin-Lafon, Wendy Mackay
- CHI 2017, *ACM UIST User Interface Software and Technology*: Wendy Mackay
- MOCO 2016, *International Symposium on Movement and Computing*: Sarah Fdili Alaoui

#### 10.1.2.3. Reviewer

- *IJHCS International Journal on Human-Computer Interaction*: Wendy Mackay
- ACM CSCW 2016 *ACM Conference on Computer-Supported Cooperative Work*: Wendy Mackay
- ACM CHI 2016 *ACM Conference on Human Factors in Computing Systems*: Marianela Cioffi Felice, Germán Leiva, Oleksandr Zinenko, Ignacio Avellino, Nolwenn Maudet, Joseph Malloch, Theophanis Tsandilas, Michel Beaudouin-Lafon, Wendy Mackay, Sarah Fdili Alaoui
- ACM UIST 2016 *ACM Symposium on User Interface Software and Technology*: Joseph Malloch, Theophanis Tsandilas, Nolwenn Maudet, Ignacio Avellino, Jessalyn Alvina, Cédric Fleury, Michel Beaudouin-Lafon, Wendy Mackay
- UBICOMP 2016, *ACM International Joint Conference on Pervasive and Ubiquitous Computing*: Theophanis Tsandilas
- SIGGRAPH Asia 2016: Theophanis Tsandilas
- ACM MobileHCI 2016, *ACM Conference on Human-Computer Interaction with Mobile Devices and Services*: Jessalyn Alvina

- IEEE 3DUI 2016, *Symposium on 3D User Interfaces*: Cédric Fleury
- IEEE Visualization: Michel Beaudouin-Lafon
- IHM 2016, *Conférence Francophone d'Interaction Homme-Machine*: Cédric Fleury
- WAMCA 2016, *Workshop on Applications for Multi-Core Architectures*: Oleksandr Zinenko
- IMPACT 2016, *International Workshop on Polyhedral Compilation Techniques*: Oleksandr Zinenko
- TEI 2016, *International Conference on Tangible, Embedded and Embodied Interactions*: Sarah Fdili Alaoui
- DIS 2016, *Designing Interactive Systems*: Sarah Fdili Alaoui

### 10.1.3. Journal

#### 10.1.3.1. Member of the Editorial Boards

- Editor for the Human-Computer Interaction area of the new ACM Books Series (published with Morgan & Claypool Publishers): Michel Beaudouin-Lafon (2013-)
- CACM, *Communications of the ACM Web Editorial Board*, ACM: Wendy Mackay (2008-)
- CACM *Communications of the ACM New Publications Board*, ACM: Wendy Mackay (2015-)
- TOCHI, *Transactions on Computer Human Interaction*, ACM: Michel Beaudouin-Lafon (2009-), Wendy Mackay (2016-)
- JIPS, *Journal d'Interaction Personne-Système*, AFIHM: Michel Beaudouin-Lafon (2009-)
- IJHCS, *International Journal of Human-Computer Study*, Elsevier: Michel Beaudouin-Lafon (Member of the Advisory Board, 2009-)
- JCSCW, *Journal of Computer Supported Cooperative Work*, Springer: Michel Beaudouin-Lafon (Member of the Advisory Board, 2010-)

#### 10.1.3.2. Reviewer - Reviewing Activities

- Computers and Graphics: Theophanis Tsandilas
- TVCG, *Transactions on Visualization and Computer Graphics*, IEEE: Cédric Fleury
- UAIS, Universal Access in the Information Society: Michel Beaudouin-Lafon
- JAISE, Journal of Ambient Intelligence and Smart Environments: Michel Beaudouin-Lafon

### 10.1.4. Invited Talks

- Beyond Lab: Entre L'Homme et la Machine : Le Défi des Nouvelles Interfaces “*Interaction en Grand*”, 8 February 2016: Michel Beaudouin-Lafon
- Beyond Lab: Entre L'Homme et la Machine : Le Défi des Nouvelles Interfaces “*Apprentissage Incrémental de Gestes*”, 8 February 2016: Wendy Mackay
- Beyond Lab: Entre L'Homme et la Machine : Le Défi des Nouvelles Interfaces “*Movement Connoisseurship for User eXperience in Digital Art and HCP*”, 8 February 2016: Sarah Fdili Alaoui
- Beyond Lab: Entre L'Homme et la Machine : Le Défi des Nouvelles Interfaces “*Papier Interactif pour la Créativité*”, 8 February 2016: Theophanis Tsandilas
- FAST (Fusing Audio and Semantic Technologies for Intelligent Music Production and Consumption) Workshop Paris “*Creative Musical Expression with Human-Computer Partnerships*”, 15 February 2016: Wendy Mackay
- ENS Cachan Seminaire d'Informatique “*Co-Adaptive Instruments. Can we reinvent the graphical user interface*”, 2 March 2016: Wendy Mackay
- Café Techno – Inria Alumni & NUMA, “*Quelles interactions avec le monde numérique de demain ?*”, March 2016: Michel Beaudouin-Lafon
- Les Outils du Design, ENSCI, “*Instrumental Interaction*”, April 2016: Michel Beaudouin-Lafon

- École Thématique Maths-Info-HPC, Saint-Germain-au-Mont-d'Or, “*Polyhedral Code Transformations via Interactive Visualizations*”, 10 May 2016: Oleksandr Zinenko
- Journée d'étude Scénariser la danse par le numérique, Université de Strasbourg “*Étude du mouvement expressif dans les interactions incorporée pour la danse*”, 18 May 2016: Sarah Fdili Alaoui
- May Residency of the Moving Stories Project, Simon Fraser University “*Embodied Interaction for dance and tools for supporting choreography*”, 28 May 2016: Sarah Fdili Alaoui
- ERC CREATIV Workshop “*Creating Human-Computer Partnerships*”, 13 June 2016: Wendy Mackay
- ICCV International Conference on Computational Creativity 2016: ERC Comics Invited Address “*Creating CoAdaptive partnerships*”, 29 June 2016: Wendy Mackay
- ENS Paris, “*Polyhedral program transformations via interactive visualization*”, 1 June 2016: Oleksandr Zinenko
- ARC Raymond Hains, Ecole Européenne Supérieure Beaux Arts de Rennes, “*Construire et déconstruire les logiciels du design*”, 11 octobre 2016: Nolwenn Maudet
- Journée MENESR-EHES: Coding and computer science in our schools: new ways of learning? “*Entre les enfants et les ordinateurs: Human Computer Interaction*”, 11 octobre 2016: Wendy Mackay
- CM Lab, Tokyo Tech, “*Designing Design Tools*”, 20 octobre 2016: Nolwenn Maudet
- Google Japan, Tokyo, Japan, “*Expressive Keyboards: Expressive Keyboards: Enriching Gesture-Typing on Mobile Devices*”, 20 October 2016: Jessalyn Alvina
- Rencontre Inria – Industrie Lille “*Interactions avec les objets ! et services numériques*”, 25 November 2016: Wendy Mackay
- TEDx Saclay, “*Dancing in digital*”, 30 November 2016: Sarah Fdili Alaoui
- Rencontres Lurs: “*Droit à l'Erreur*”, 25 August 2016: Wendy Mackay
- UniThé ou Café “*Créer des Partenariats Homme-Machine*”, 17 November 2016: Wendy Mackay
- Infomuse, Casa Paganini “*Embodied Interaction for dance and tools for supporting choreograph*”, 14 Decembre 2016: Sarah Fdili Alaoui

### 10.1.5. Scientific Expertise

- European Research Council, Panel member for Starting Grants: Michel Beaudouin-Lafon
- CNRS Mission pour l'Interdisciplinarité, Panel member for the call “*Sciences Sociales et Cognitives des Comportements Collectifs*”: Michel Beaudouin-Lafon
- ACM/CHI Best Paper Award Committee “*Best Paper Award Committee*”: Wendy Mackay
- ACM/SIGCHI “*Lifetime Service Award Committee*”: Wendy Mackay

### 10.1.6. Research Administration

- Computer Science Department, Université Paris-Saclay: Wendy Mackay (member of steering committee)
- CNRS, Conseil Scientifique de l'Institut INS2I: Michel Beaudouin-Lafon (member)
- Telecom ParisTech: Michel Beaudouin-Lafon (member of research committee)
- IRCAM: Michel Beaudouin-Lafon (member of scientific committee)
- “*Institut de la Société Numérique*”, IDEX Laboratory of Université Paris-Saclay: Michel Beaudouin-Lafon (member of steering committee)
- “*Conseil de Laboratoire*”, LRI: Wendy Mackay, Cédric Fleury (members)
- “*Conseil Scientifique*”, LRI: Michel Beaudouin-Lafon (member)
- “*Commission Locaux*”, LRI: Theophanis Tsandilas (member)

- CCSU, “Commission Consultative de Spécialistes de l’Université”, Computer Science department: Michel Beaudouin-Lafon, Wendy Mackay (members)
- COERLE “Comité Operationnel d’Evaluation des Risques Légaux et Ethiques”, Inria: Wendy Mackay
- CERNI “Comité d’Ethique pour les Recherches Non Interventionnelles”, Université Paris-Sud: Wendy Mackay
- “Commission de Développement Technologique”, Inria: Theophanis Tsanidlas (member), until April 2016

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

- Interaction & HCID Masters: Wendy Mackay, *Career Seminar* 21 hrs, M2, Univ. Paris-Sud
- Interaction & HCID Masters: Michel Beaudouin-Lafon, *Fundamentals of Human-Computer Interaction*, 21 hrs, M1/M2, Univ. Paris-Sud
- Interaction & HCID Masters: Michel Beaudouin-Lafon, Wendy Mackay *Fundamentals of Situated Interaction*, 21 hrs, M1/M2, Univ. Paris-Sud
- Interaction & HCID Masters: Wendy Mackay, *Design of Interactive Systems*, 21 hrs, M1/M2, Univ. Paris-Sud
- Interaction & HCID Masters: Wendy Mackay, *Advanced Design of Interactive Systems*, 21 hrs, M1/M2, Univ. Paris-Sud
- Interaction & HCID Masters: Wendy Mackay, *Business Development Lab* 21 hrs, M1, Univ. Paris-Sud
- Interaction & HCID Masters: Michel Beaudouin-Lafon & Cédric Fleury, *Groupware and Collaborative Interaction*, 31.5 hrs, M1/M2, Univ. Paris-Sud
- Interaction & HCID Masters: Sarah Fdili Alaoui, *Creative Design*, 21 hrs, M1/M2, Univ. Paris-Sud
- Interaction & HCID Masters: Sarah Fdili Alaoui, *Design Project*, 21 hrs, M1/M2, Univ. Paris-Sud
- Interaction & HCID Masters: Sarah Fdili Alaoui, *Gesture and Mobile Interaction*, 4 hrs, M1/M2, Univ. Paris-Sud
- HCID Masters: Wendy Mackay & Michel Beaudouin-Lafon, *Fundamentals of Situated Interaction*, 21 hrs, M2, Univ. Paris-Sud
- Interaction & HCID Masters: Sarah Fdili Alaoui, *Programmation des interfaces interactives avancées*, 15 hrs, L3, Univ. Paris-Sud
- Polytech 5th year Apprentices: Sarah Fdili Alaoui, *Informatique Graphique et visualisation*, 12 hrs, M2, Univ. Paris-Sud
- Polytech 5th year: Cédric Fleury, *Réalité Virtuelle et Interaction*, 48 hrs, M2, Univ. Paris-Sud
- Polytech 3st year: Cédric Fleury, *Interaction Homme-Machine*, 18 hrs, M1, Univ. Paris-Sud
- Polytech 3st year: Cédric Fleury, *Projet Java-Graphique-IHM*, 24 hrs, M1, Univ. Paris-Sud
- Polytech 1st year: Cédric Fleury, *Introduction à l’Informatique*, 71 hrs, L1, Univ. Paris-Sud
- M1 Informatique: Theophanis Tsandilas, *Évaluation des Interfaces*, 2 hrs, M1, Univ. Paris-Sud

### 10.2.2. Supervision

#### PhD students

- PhD: Oleksandr Zinenko, *Interactive Program Restructuring*, Université Paris-Saclay, 25 November 2016. Advisors: Stéphane Huot (Inria Lille) & Cédric Bastoul (Université de Strasbourg)



PhD: Ghita Jalal, *Supporting visual composition with reified interactive properties*, Université Paris-Saclay, 16 December 2016. Advisor: Wendy Mackay

PhD in progress: Ignacio Avellino, *Remote Collaboration in Large Interactive Spaces*, September 2014. Advisors: Michel Beaudouin-Lafon & Cédric Fleury

PhD in progress: Jessalyn Alvina, *Mobile Co-Adaptive Instruments*, September 2014. Advisor: Wendy Mackay

PhD in progress: Nolwenn Maudet, *Substrates and Co-Adaptive Instruments*, September 2014. Advisors: Wendy Mackay & Michel Beaudouin-Lafon

PhD in progress: Marc-Emmanuel Perrin, *Novel Interaction Models for Multi-surface Visualization*, September 2014. Advisors: Michel Beaudouin-Lafon & James Eagan (Télécom ParisTech)

PhD in progress: Marianela Ciolfi Felice, *Substrates and Co-adaptive Instruments for Creativity*, September 2015. Advisors: Wendy Mackay & Sarah Fdili Alaoui

PhD in progress: Carla Griggio, *Interactive Human-Machine Learning*, September 2015. Advisor: Wendy Mackay

PhD in progress: Germán Leiva, *Interaction-driven Software Development*, September 2015. Advisor: Michel Beaudouin-Lafon

PhD in progress: Wanyu Liu, *Modeling the speed-accuracy trade-off of pointing tasks using the tools of information theory*, October 2015. Advisors: Olivier Rioul (Institut Mines Telecom) & Michel Beaudouin-Lafon

PhD in progress: Yujiro Okuya, *Sensorimotor interface for Collaborative Virtual Environments based on heterogeneous interactive devices: application to industrial design*, October 2015. Advisors: Patrick Bourdot (LIMSI-CNRS) & Cédric Fleury

PhD in progress: Michael Wessely, *Sketching and Physical Prototyping for Creative Fabrication Design*, November 2015. Advisors: Theophanis Tsandilas & Wendy Mackay

PhD in progress: Stacy (Shu-Yuan) Hseuh, *Embodied design for Human-Computer Co-creation*, November 2015. Advisors: Wendy Mackay & Sarah Fdili Alaoui

PhD in progress: Philip Tchernavskij, *Towards Unified Principles of Interaction*, October 2016. Advisor: Michel Beaudouin-Lafon

#### *Masters students*

Brennan Jones, University of Calgary, “Physical and virtual avatars for telepresence and remote collaboration”: Ignacio Avellino, Cédric Fleury & Michel Beaudouin-Lafon

Francesco Vitale, Université Paris-Saclay, “Field study of operating systems upgrades”: Joanna McGrenere, Wendy Mackay

Dimitri Belopopsky, Université Paris-Saclay, “La Grande Vitrine des Choses”: Michel Beaudouin-Lafon, Wendy Mackay, Joseph Malloch

Sruthi Coimbatore Viswanathan, Université Paris-Saclay, “Touch Keyboard with Haptic Feedback”: Michel Beaudouin-Lafon

Iva Karabatic, Université Paris-Saclay, “Chord input on a digital whiteboard”: Wendy Mackay, Michel Beaudouin-Lafon

Diana Lipcanu, Université Paris-Saclay, “The Inteaction Musuem”: Wendy Mackay, Michel Beaudouin-Lafon

Isha Van Baar, Université Paris-Saclay, “The Inteaction Musuem”: Wendy Mackay, Michel Beaudouin-Lafon

Nam Giang, Université Paris-Saclay, “Interactive Video Preview Playlist”: Wendy Mackay, Carla Griggio

Midas Nouwens, Université Paris-Saclay, “Communication Appliances to Support Communication for Distributed Families”: Wendy Mackay, Carla Griggio

Pierre Mahe, IRCAM, “EMBRACe Expressive Movement Body fRAMework and Computing”: Sarah Fdili Alaoui

Niels Mourette, IRCAM, “The augmented body from within”: Sarah Fdili Alaoui

Shu-Yuan Hsueh, IRCAM & ENSCII, “Dynamic Guides for Embodied Interactiob”: Wendy Mackay, Sarah Fdili Alaoui

Philip Tchernavskij, University of Aarhus, “Information Substrates for Asymmetrical Collaboration”: Wendy Mackay, Michel Beaudouin-Lafon

### 10.2.3. Juries

Mathieu Le Goc, Inria Saclay, December 2016 (Advisor: Jean-Daniel Fekete): Michel Beaudouin-Lafon, President.

Alex Goguey, Inria Lille, October 2016 (Advisor: Géry Casiez): Michel Beaudouin-Lafon, reviewer.

Andéol Evain, IRISA, December 2016 (Advisor: Anatole Lécuyer): Michel Beaudouin-Lafon, reviewer.

Emiline Brulé, Télécom Paris, 6 June 2016 (Advisor: Annie Gentes): Wendy Mackay, reviewer.

## 10.3. Popularization

Organisation d’une Journée d’étude, 15 April 2016 @ ENSCI *La fabrique des outils, concevoir et pratiquer les logiciels de design*: Nolwenn Maudet

BeyondLab, 10 February 2016 *Meet-up sur les nouvelles interfaces*: Sarah Fdili Alaoui, Michel Beaudouin-Lafon, Wendy Mackay, and Theophanis Tsandilas

Inria Rencontres Industrielles 2016, “*Expressive Keyboards: Enriching Gesture-Typing on Mobile Devices*”, 25 November 2016: Jessalyn Alvina, Wendy Mackay

Inria Rencontres Industrielles 2016, “*StickyLines: Reifying Alignment and Distribution of Graphical Objects*”, 25 November 2016: Michel Beaudouin-Lafon, Wendy Mackay

ACM UIST Demonstration, “*Expressive Keyboards*”, Jessalyn Alvina

ACM UIST Demonstration, “*StickyLines*”, Marianela Ciolfi

ACM UIST Demonstration, “*Stretchis*”, Michael Wessely

ACM UIST Demonstration, “*UIST Video Playlist*”, Carla Griggio

ACM “*HCI Pioneers*”, Michel Beaudouin-Lafon, Wendy Mackay

## GRAPHDECO Project-Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Scientific Events Organisation

#### 9.1.1.1. General Chair, Scientific Chair

George Drettakis chairs the Eurographics working group on Rendering.

### 9.1.2. Scientific Events Selection

#### 9.1.2.1. Chair of Conference Program Committees

Adrien Bousseau is co-chair of the Tutorial program of Eurographics 2017.

#### 9.1.2.2. Member of Conference Program Committees

Adrien Bousseau was on the program committee of Eurographics 2017 and of SIGGRAPH Asia 2016 technical briefs and posters.

### 9.1.3. Journal

#### 9.1.3.1. Member of the Editorial Boards

Adrien Bousseau is Associate Editor of The Visual Computer journal (Springer)

George Drettakis is Associate Editor of ACM Transactions on Graphics (TOG) and of Computational Visual Media (CVM).

#### 9.1.3.2. Reviewer - Reviewing Activities

Adrien Bousseau was reviewer for ACM TOG, IEEE TVCG, SIGGRAPH, SIGGRAPH Asia, Computers & Graphics, ACM CHI, ACM UIST, AFIG.

George Drettakis was reviewer for SIGGRAPH, Computer Graphics Forum.

### 9.1.4. Leadership within the Scientific Community

George Drettakis chairs the local “Jacques Morgenstern” Colloquium organizing committee.

### 9.1.5. Scientific Expertise

G. Drettakis is a member of the Scientific Advisory Board (SAB) of Aalto University, Finland, and participated in the SAB meeting at Aalto in October.

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

Licence : Abdelaziz Djelouah, TP système d’information, niveau L1, Université Nice Sophia Antipolis, 24h

Licence : Johanna Delanoy, TP Bases de données and personal project, niveau L1, IUT - Université Nice Sophia Antipolis, 64h

Masters II: G. Drettakis, A. Bousseau: Foundations of Image Synthesis, CentralSupélec, Paris, 28h

Masters I: A. Bousseau, G. Drettakis: Image Synthesis International Masters I, University of Nice Sophia-Antipolis, 12h

Masters I: G. Drettakis, A. Bousseau: Image Synthesis, Masters MAPI Cannes, University of Nice Sophia-Antipolis, 12h

### 9.2.2. Supervision

PhD in progress : Rodrigo Ortiz-Cayon, Mixed image-based rendering, Nice Sophia Antipolis University, started Dec. 2013, to be defended in Feb. 2017, advisor: G. Drettakis

PhD in progress : Théo Thonat, Multi-view image processing for image-based rendering, Nice Sophia Antipolis University, started Oct. 2015, advisor: G. Drettakis

PhD in progress : Johanna Delanoy, Data-driven sketch-based modeling, Nice Sophia Antipolis University, started Oct. 2015, advisor: A. Bousseau

PhD in progress : Jean-Dominique Favreau, geometric analysis of line drawings, Nice Sophia Antipolis University, started Oct. 2014, advisor: A. Bousseau and F. Lafarge (Titane)

PhD in progress : Valentin Deschaintre, lightweight material capture, Nice Sophia Antipolis University, started Nov. 2016, advisor: A. Bousseau and G. Drettakis

PhD in progress : Julien Philip, Mixed rendering for cultural heritage, Nice Sophia Antipolis University, started Nov. 2016, advisor: G. Drettakis

PhD in progress : Simon Rodriguez, Combining image-based and procedural modeling, Nice Sophia Antipolis University, started Nov. 2016, advisor: G. Drettakis

### 9.2.3. Juries

Adrien Bousseau was in the PhD committees of Boris Raymond (Inria Bordeaux) and Elena Garces (University of Zaragoza)

George Drettakis was in the PhD committees Oriel Frigo (Paris Descartes) and was an evaluator (rapporteur) for Kaan Yucer (ETH Zurich) and Yitzchak Lockerman (Yale).

## 9.3. Popularization

George Koulieris described his research in an interview for the Inria@SiliconValley Newsletter <sup>0</sup>.

Adrien Bousseau described his research in two interviews for the Inria website <sup>00</sup>.

Adrien Bousseau gave demos of his tool to help people practice drawing-by-observation techniques during the “Rencontres du numérique” organized by ANR (Nov. 16th) and during the “Rencontres Inria-Industrie” on e-learning (Dec. 1st).

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<sup>0</sup><https://project.inria.fr/siliconvalley/2016/06/21/post-doc-george-koulieris/>

<sup>0</sup><https://www.inria.fr/en/centre/sophia/news/adrien-bousseau-receives-an-erc-starting-grant>

<sup>0</sup><https://www.inria.fr/centre/sophia/actualites/adrien-bousseau-laureat-du-prix-jeune-chercheur>

## HYBRID Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific events organisation

#### 10.1.1.1. General chair, scientific chair

- Bruno Arnaldi was Scientific Chair of "Journées de l'AFRV" 2016, Brest, France.
- Anatole Lécuyer was Program Chair of IEEE Virtual Reality 2016.
- Maud Marchal was Program Chair of IEEE Symposium on 3D User Interfaces 2016.

### 10.1.2. Scientific events selection

#### 10.1.2.1. Member of the conference program committees

- Anatole Lécuyer was Member of the conference program committee of Eurohaptics 2016.
- Ferran Argelaguet was Member of the conference program committee of IEEE Symposium on 3D User Interfaces 2016, ACM Virtual Reality Software and Technology 2016, and ACM Symposium on Spatial User Interfaces 2016.
- Maud Marchal was Member of the best paper committee of "Journées Françaises de l'Informatique Graphique" 2016.
- Valérie Gouranton was Member of the program committee of 3DCVE Workshop 2016.

#### 10.1.2.2. Reviewer

- Ferran Argelaguet was Reviewer for ACM CHI 2016, Eurohaptics 2016.
- Maud Marchal was Reviewer for ACM Siggraph 2016, IEEE Virtual Reality 2016, IEEE Symposium on 3D User Interfaces 2016, Eurohaptics 2016.
- Valérie Gouranton was Reviewer for IEEE Virtual Reality 2016.

### 10.1.3. Journal

#### 10.1.3.1. Member of the editorial boards

- Anatole Lécuyer is Associate Editor of Frontiers in Virtual Environments, and Presence journals.
- Ferran Argelaguet is Review Editor of Frontiers in Virtual Environments.
- Maud Marchal is Associate Editor of Computer Graphics Forum, Review Editor of Frontiers in Virtual Environments, and Member of the Editorial Board of Revue Francophone d'Informatique Graphique.

#### 10.1.3.2. Reviewer - Reviewing activities

- Ferran Argelaguet was Reviewer for ACM Transactions on Graphics, IEEE Transactions on Visualization and Computer Graphics, and The Visual Computer.
- Maud Marchal was Reviewer for IEEE Transactions on Visualization and Computer Graphics, IEEE Transactions on Haptics, and The Visual Computer.
- Valérie Gouranton was Reviewer for Revue d'Intelligence Artificielle.

### 10.1.4. Invited talks

- Ferran Argelaguet was invited at the Bauhaus University Weimar (November 16).

### 10.1.5. Leadership within the scientific community

- Bruno Arnaldi is Vice-President of AFRV (French Association for Virtual Reality).

- Valérie Gouranton is Member of Executive Committee of AFRV (French Association for Virtual Reality).

### 10.1.6. Scientific expertise

- Bruno Arnaldi was Expert for French ANR (Agence Nationale de la Recherche).
- Maud Marchal was Expert for the Natural Sciences and Engineering Research Council of Canada (NSERC).

### 10.1.7. Research administration

- Bruno Arnaldi is Deputy Director of IRISA.
- Maud Marchal is Co-Head of the MRI Master Research in Computer Science.

## 10.2. Teaching - Supervision - Juries

Anatole Lécuyer:

Master MNRV: "Haptic Interaction", 9h, M2, ENSAM, Laval, FR

Ecole Centrale de Nantes : "Haptic Interaction and Brain-Computer Interfaces", 4.5h, M1-M2, Ecole Centrale de Nantes, FR

Master SIBM: "Haptic and Brain-Computer Interfaces", 4.5h, M2, University of Rennes 1, FR

Bruno Arnaldi:

Master INSA Rennes: "VAR: Virtual and Augmented Reality", 12h, M2, INSA Rennes, FR

Master INSA Rennes: "Virtual Reality", courses 6h, projects 16h, M1 and M2, INSA Rennes, FR

Master INSA Rennes: Projects on "Virtual Reality", 20h, M1, INSA Rennes, FR

Ferran Argelaguet:

Master STS Informatique MITIC: "Techniques d'Interaction Avancées", 26h, M2, ISTIC, University of Rennes 1, FR

Master INSA Rennes: "Modeling and Engineering for Biology and Health Applications", 12h, M2, INSA Rennes, FR

Maud Marchal:

Master INSA Rennes: "Modeling and Engineering for Biology and Health Applications", 48h, M2 and responsible of this lecture, INSA Rennes, FR

Master SIBM: "Biomedical simulation", 3h, M2, University of Rennes 1, FR

Valérie Gouranton:

Licence: "Introduction to Virtual Reality", 22h, L2 and responsible of this lecture, INSA Rennes, FR

Licence: Project on "Virtual Reality", 16h, L3 and responsible of this lecture, INSA Rennes, FR

Master INSA Rennes: "Virtual Reality", 16h, M2, INSA Rennes, FR

Master INSA Rennes: Projects on "Virtual Reality", 20h, M1, INSA Rennes, FR

Florian Nouviale:

Ecole Centrale de Nantes: "Training on Unity3D", 6h, M1/M2, Ecole Centrale de Nantes, FR

Ronan Gaugne:

Insa Rennes: Projects on "Virtual Reality", 50h, L3/M1/M2, Insa Rennes, FR

### 10.2.1. Supervision

#### 10.2.1.1. PhD (defended)

- Guillaume Claude, "The sequencing of actions in collaborative virtual environments", INSA Rennes, July 2016, Supervised by Bruno Arnaldi, Valérie Gouranton
- François Lehericey, "Détection de collision par lancer de rayon : la quête de la performance", INSA Rennes, September 2016, Supervised by Bruno Arnaldi, Valérie Gouranton
- Jérémy Lacoche, "Plasticity for User Interfaces in Mixed Reality", Université Rennes 1, July 2016, Supervised by Thierry Duval, Bruno Arnaldi, Jérôme Royan, Eric Maisel
- Morgan Le Chénéchal, "Awareness Model for Asymmetric Remote Collaboration in Mixed Reality", INSA Rennes, July 2016, Supervised by Bruno Arnaldi, Thierry Duval, Valérie Gouranton, Jérôme Royan
- Lucas Royer, "Visualization tools for needle insertion in interventional radiology", INSA Rennes, December 6th, 2016, Supervised by Alexandre Krupa and Maud Marchal
- Andéol Evain, "Optimizing the Use of SSVEP-based Brain-Computer Interfaces for Human-Computer Interaction", University of Rennes 1, December 6th, 2016, Supervised by Anatole Lécuyer, Nicolas Roussel, Géry Casiez and Ferran Argelaguet

#### 10.2.1.2. PhD (in progress)

- Jean-Baptiste Barreau, "Virtual Reality and Archaeology", Started in February 2014, Supervised by Valérie Gouranton and Bruno Arnaldi
- Benoit Le Gouis, "Multi-scale physical simulation", Started in October 2014, Supervised by Bruno Arnaldi, Maud Marchal and Anatole Lécuyer
- Lorraine Perronet, "Neurofeedback applications based on EEG, fMRI and VR", Started in January 2014, Supervised by Christian Barillot and Anatole Lécuyer
- Gwendal Le Moulec, "Automatic generation of VR applications", Started in October 2015, Supervised by Valérie Gouranton, Bruno Arnaldi and Arnaud Blouin
- Anne-Solène Dris-Kerdreux, "Training in virtual reality for construction applications", Started in November 2015, Supervised by Valérie Gouranton and Bruno Arnaldi
- Antoine Costes, "Haptic texturing", Started in November 2015, Supervised by Anatole Lécuyer and Ferran Argelaguet
- Guillaume Cortes, "Improving tracking in VR", Started in November 2015, Supervised by Anatole Lécuyer
- Hakim Si-Mohammed, "BCI and HCI", Started in October 2016, Supervised by Anatole Lécuyer and Ferran Argelaguet
- Gautier Picard, "Collaborative VR", Started in October 2016, Supervised by Valérie Gouranton, Bernard Gibaud and Bruno Arnaldi
- Hadrien Gurnel, "Prise en compte de la déformation d'organe pour l'assistance robotisée d'insertion d'aiguille", Started in October 2016, Supervised by Alexander Krupa and Maud Marchal

### 10.2.2. Juries

#### 10.2.2.1. Selection committees

- Bruno Arnaldi was Member of Selection committee of Assistant Professor Position at Ecole Centrale de Nantes.

#### 10.2.2.2. PhD and HDR juries

- Anatole Lécuyer was Member of PhD committees of Henrique Debarba (EPFL, Switzerland), Axelle Pillain (Telecom Bretagne), Maxence Rangé (Univ. Rennes 1), Jérémie Plouzeau (ENSAM Chalon), Andéol Evain (Univ. Rennes 1), and Member of HDR committee of Reinhold Scherer (TU Graz, Austria).

- Bruno Arnaldi was President of PhD committees of Kévin Jordao (INSA de Rennes), Hui-Yin Wu (Univ. Rennes 1), Charlotte Hoareau (Enib Brest), Sabhi Ahmed (Paris 8), Guillaume Claude (INSA Rennes), Morgan Le Chénéchal (INSA Rennes) and François Lehericey (INSA Rennes), Jérémy Lacoche (Univ. Rennes 1)
- Valérie Gouranton was Member of PhD committees of Guillaume Claude (INSA Rennes), Morgan Le Chénéchal (INSA Rennes) and François Lehericey (INSA Rennes)
- Maud Marchal was Reviewer of PhD theses of Johan Sarrazin (Univ. Grenoble Alpes), Pierre-Luc Manteaux (Univ. Grenoble Alpes) and Camille Schreck (Univ. Grenoble Alpes), and Member of PhD committee of Lucas Royer (INSA Rennes).
- Ferran Arguelaguet was Member of PhD committee of Andéol Evain (Univ. Rennes 1).

### 10.3. Popularization

The team has organized, together with MimeTIC team, a press conference and a press release on the "6-Finger Illusion" in May 2016. This event has been followed by lots of articles (internet, press) and radio coverages, including: France Inter, RFI, Europe 1, Le Monde, Libération, Les Echos, etc.

In addition, the results of the team have been disseminated in several other media coverages in 2016:

- "Journal télévisé 20h" (National prime time news), France2 channel (02/16) : presentation of the BCI activity.
- "Journal télévisé du soir", TVRennes channel (04/16) : presentation of the Forum Eurocities visit in Immersia.
- "La tête au carré", France Inter radio (10/16) : participation of Anatole Lécuyer.

The team has also participated to numerous dissemination events in 2016 (chronological order):

- "Open House ISTIC 2016" (Rennes, 01/16) : booth and demos of the team.
- "Forum EuroCities" (Rennes, 04/16) : presentation from Ronan Gaugne and demos in Immersia.
- "Les 10 ans du Quai Branly" (Paris, "Quai Branly" Museum, 06/16) : talk from Valérie Gouranton and Ronan Gaugne on virtual archaeology.
- "French-American Doctorat Exchange program 2016" (Rennes, 07/16): presentation from Ferran Argelaguet on Hybrid activities.
- "Journées du Patrimoine 2016" (Rennes, "Champs Libres" Museum, 09/16) : demos related to virtual archaeology.
- "Journées Science et Musique 2016" (Rennes, 10/16) : co-organization of this event, and presentation of several demos.
- "Nuit Art et Science 2016" (Brest, 10/16) : demo on musical composition history in virtual reality and Immersia.
- "NEUROPLANETE 2016" (Nice, 10/16) : talk from Anatole Lécuyer and dissemination in "Le Point" journal.
- "Rencontres Inria Industrie: Interactions avec les objets et services numériques" (Lille, 11/16): demonstration from Ferran Argelaguet.



## ILDA Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific events organisation

#### 10.1.1.1. General chair, scientific chair

- CHI 2017, 35th ACM SIGCHI Conference on Human Factors in Computing Systems: Caroline Appert (papers and notes co-chair)

### 10.1.2. Scientific events selection

#### 10.1.2.1. Chair of conference program committees

- CHI 2017, 35th ACM SIGCHI Conference on Human Factors in Computing Systems: Emmanuel Pietriga (SC - subcommittee chair)

#### 10.1.2.2. Member of the conference program committees

- CHI 2017, 35th ACM SIGCHI Conference on Human Factors in Computing Systems: Anastasia Bezerianos (AC - associate chairs)
- CHI 2016, 34th ACM SIGCHI Conference on Human Factors in Computing Systems: Anastasia Bezerianos, Emmanuel Pietriga (AC - associate chairs)
- UIST 2016, 29th ACM ACM User Interface Software and Technologies Symposium: Caroline Appert, Anastasia Bezerianos (AC - associate chairs)
- InfoVis 2016, IEEE Information Visualization Conference: Anastasia Bezerianos (AC - associate chair)
- EICS 2016, 8th ACM SIGCHI Symposium on Engineering Interactive Computing Systems: Emmanuel Pietriga
- VOILA @ ISWC 2016, Visualizations and User Interfaces for Ontologies and Linked Data, workshop co-located with ISWC 2016: Emmanuel Pietriga
- SSDBM 2016: 28th International Conference on Scientific and Statistical Database Management: Emmanuel Pietriga
- Immersive Analytics @ ISS 2016: Exploring Future Interaction and Visualization Technologies for Data Analytics, workshop co-located with ACM ISS 2016: Emmanuel Pietriga
- IHM 2016 – Conference of the Association Francophone d’Interaction Homme-Machine: Olivier Chapuis (AC - associate chair)

#### 10.1.2.3. Reviewer

- ACM CHI 2016, Conference on Human Factors in Computing Systems: Olivier Chapuis, María-Jesús Lobo, Arnaud Prouzeau
- ACM UIST 2016, Symposium on User Interface Software and Technology: Olivier Chapuis, Emmanuel Pietriga
- EuroVis EG/VGTC 2016, Conference on Data Visualization: Caroline Appert
- ACM ISS 2016, International Conference on Interactive Surfaces and Spaces: Caroline Appert, Olivier Chapuis
- ACM MobileHCI 2016, International Conference on Human-Computer Interaction with Mobile Devices and Services: Caroline Appert
- ACM IUI 2017, International Conference on Intelligent User Interfaces: Caroline Appert

- IEEE VR 2016, Virtual Reality: Olivier Chapuis
- ACM EICS 2016, Symposium on Engineering Interactive Computing Systems: Olivier Chapuis

### **10.1.3. Journal**

#### *10.1.3.1. Member of the editorial boards*

- Semantic Web Journal: Emmanuel Pietriga (guest editor, special issue on Visual Exploration and Analysis of Linked Data)

#### *10.1.3.2. Reviewer - Reviewing activities*

- ACM ToCHI, Transactions on Computer-Human Interaction: Olivier Chapuis
- IHCI, International Journal of Human-Computer Interaction: Olivier Chapuis, Emmanuel Pietriga
- IEEE TVCG, Transactions on Visualization and Computer Graphics: Anastasia Bezerianos

### **10.1.4. Invited talks**

- Olivier Chapuis, L'équipement d'excellence Digiscope: un réseau de plateformes pour la visualisation interactive, CNRS Innovatives Big Data Forum, October 2016, Paris France.
- Anna Gogolou, Visualization and human-computer interaction methods: Challenges in Interactive Visual Exploration of Large Data Series, 2nd Interdisciplinary Time Series Workshop, December 2016, Paris France.
- Anastasia Bezerianos, Hands-on session on visualization and human-computer interaction methods: Designing interactive visualization techniques for large data series, 2nd Interdisciplinary Time Series Workshop, December 2016, Paris France.

### **10.1.5. Scientific expertise**

- Evaluator for the Sponsored Program for Industrial Data Science (EDF & Thales) - Fondation Mathématique Jacques Hadamard/IRSDI: Emmanuel Pietriga

### **10.1.6. Research administration**

- Executive committee of the Laboratoire de Recherche en Informatique (LRI): Olivier Chapuis
- President of Inria Saclay - Île de France's Commission for Technological Development (CDT): Emmanuel Pietriga

### **10.1.7. Learned societies**

- Association Francophone d'Interaction Homme-Machine (AFIHM): Olivier Chapuis (board member, vice-president).

### **10.1.8. Hiring committees**

- Univ. Paris-Sud hiring committee, Commission Consultative des Spécialistes de l'Université 27ème section (computer science), members: Caroline Appert.
- Univ. Paris-Sud hiring committee, Comités de Sélection PRCE/PRAG 1195 (english language), members: Anastasia Bezerianos.

## **10.2. Teaching - Supervision - Juries**

### **10.2.1. Teaching**

Master: Anastasia Bezerianos, Co-Head of EIT masters M1 & M2 HCID, Univ. Paris-Sud

Master: Anastasia Bezerianos, Co-Head of M2 Interaction, Univ. Paris-Sud, Université Paris-Saclay

Master: Anastasia Bezerianos, Programming of Interactive Systems – 21h CM, M1/M2 HCID + M2R Interaction, Univ. Paris-Sud

Master: Anastasia Bezerianos, Mixed Reality and Tangible Interaction – 11h CM, M1/M2 HCID + M2R Interaction, Univ. Paris-Sud

Master: Anastasia Bezerianos, Career Seminar, – 12h CM, M2 HCID + M2R Interaction, Univ. Paris-Sud

Master: Anastasia Bezerianos, Design Project in HCI, – 21h CM, M1 HCID, Univ. Paris-Sud

Master: Anastasia Bezerianos, HCI Project, – 21h CM, M2 HCID + M2 Interaction, Univ. Paris-Sud

Master: Anastasia Bezerianos, Introduction to Java – 18h CM, M1/M2 HCID + M2R Interaction, Univ. Paris-Sud

Master: Caroline Appert, Evaluation of Interactive Systems – Intro, 21h CM, M1/M2 HCID + M2R Interaction, Univ. Paris-Sud

Master: Caroline Appert, Evaluation of Interactive Systems – Advanced, 21h CM, M1/M2 HCID + M2R Interaction, Univ. Paris-Sud

Master: Emmanuel Pietriga, Data Visualization, 24h CM, M2 Informatique Décisionnelle, Univ. Paris-Dauphine.

Licence: María-Jesús Lobo, Informatique Graphique, 28h, L3 Univ. Paris-Sud

Licence: María-Jesús Lobo, Programmation d’Interfaces Interactives avancées, 29h, L3 Univ. Paris-Sud

Master: Arnaud Prouzeau, Programming of Interactive Systems: 27h, Univ. Paris-Sud.

Licence: Arnaud Prouzeau, Programmation Impérative en C++, 22.4h, Univ. Paris-Sud.

Licence: Arnaud Prouzeau, Programmation Impérative Avancée en C++, 16.5h, Univ. Paris-Sud.

Licence: Arnaud Prouzeau, Interaction Homme-Machine, 12h, olytech Paris-Sud.

Licence: Bruno Fruchard, Développement d’Applications Mobiles, 13h, Télécom Paristech.

Licence: Bruno Fruchard, Paradigmes de programmation, 24.5h, Télécom Paristech.

### 10.2.2. Supervision

PhD in progress : Anna Gogolou, Iterative and expressive querying for big data series, October 2016, Advisors: Anastasia Bezerianos, Themis Palpanas

PhD in progress : María-Jesús Lobo, Interaction Techniques for Map Multiplexing, since October 2014, Advisors: Caroline Appert, Emmanuel Pietriga

PhD in progress : Rafael Morales Gonzalez, Surface Gestures for Advanced Graphical Interfaces: Which Gesture for What, since November 2014, Advisors: Caroline Appert, Gilles Bailly, Emmanuel Pietriga

PhD in progress : Arnaud Prouzeau, Collaboration around Wall-Displays in Time Critical and Command and Control Contexts, since October 2014, Advisors: Anastasia Bezerianos, Olivier Chapuis

PhD in progress : Hugo Romat, Nouvelles techniques de visualisation et de manipulation interactive de collections de documents et données hétérogènes, since June 2016, Advisors: Caroline Appert, Emmanuel Pietriga

PhD in progress : Evanthia Dimara, Merging Interactive Visualization and Automated Analysis for Group Decision-Making Involving Large Datasets, since October 2014, Advisors: Pierre Dragicevic, Anastasia Bezerianos

PhD in progress : Bruno Fruchard, Techniques d’interaction exploitant la mémoire spatiale pour faciliter l’accès rapide aux commandes et aux données, since October 2015, Advisors: Eric Lecolinet, Olivier Chapuis

Master: Dylan Lebout, Indirect vs Direct surface gestures for wall-sized displays, May - August 2016, Advisors: Caroline Appert, Olivier Chapuis

### **10.2.3. Juries**

PhD: Rémy Dautriche, Université Grenoble-Alpes: Emmanuel Pietriga (rapporteur)

PhD: Pascal Goffin, Inria / Université Paris-Saclay: Emmanuel Pietriga (président du jury)

## **10.3. Popularization**

- SPIE Newsroom: E. Pietriga, F. del Campo, A. Ibsen, R. Primet, C. Appert, O. Chapuis, M. Hempel, R. Muñoz, S. Eyheramendy Duerr, A. Jordan, H. Dole, Ultra-high-resolution walls for visualizing very large datasets, May 2016. <http://spie.org/newsroom/6505-ultra-high-resolution-walls-for-visualizing-very-large-datasets>

## IMAGINE Project-Team

# 8. Dissemination

## 8.1. Promoting Scientific Activities

### 8.1.1. Scientific Events Organisation

#### 8.1.1.1. Member of the Organizing Committees

Remi Ronfard was

- co-organizer of the Eurographics workshop on intelligent cinematography and editing (WICED) in Lisbon, Portugal in May 2016.
- co-organizer of the Computational Modeling of Narrative (CMN) conference in Cracow, Poland in July 2016.

### 8.1.2. Scientific Events Selection

#### 8.1.2.1. Chair of Conference Program Committees

- Marie-Paule Cani was chosen as Technical Paper Chair of Siggraph 2017 and started working on this since January 2016, with several meetings in the US throughout the year.
- Stefanie Hahmann was Paper Chair of Symposium on Solid and Physical Modeling (SPM) 2016.

#### 8.1.2.2. Member of the Conference Program Committees

- Marie-Paule Cani served in the Papers Committees of Eurographics 2016 and Siggraph 2016.
- Frédéric Devernay served as a member of the program committee for IEEE CVPR 2016, ECCV 2016, 3DV 2016, CVMP 2016, RFIA 2016.
- Damien Rohmer was member of the International Program Committee for Symposium on Solid and Physical Modeling (SPM) and Shape Modeling International-Sculpting Event (SMI-FASE). He was also member of the jury of the best paper for AFIG-EGFR.
- Remi Ronfard was a member of the Program Committees for Motion in Games (MIG 2016), International Conference on Interactive Storytelling (ICIDS 2016) and Intelligent Narrative Technology (INT 2016).
- Stefanie Hahmann serves in the International Program Committee for Eurographics 2016 and Shape Modeling International (SMI) 2016.
- Jean-Claude Léon was member of the International Program Committee for Symposium on Solid and Physical Modeling (SPM) and Shape Modeling International-Sculpting Event (SMI-FASE)

#### 8.1.2.3. Reviewer

- Damien Rohmer was reviewer for ACM SIGGRAPH Asia.
- Remi Ronfard was a reviewer for Computer Vision and Pattern Recognition (CVPR) and Computer Human Interface (CHI) conferences in 2016.

### 8.1.3. Journal

#### 8.1.3.1. Member of the Editorial Boards

- Marie-Paule Cani is an Associate Editor of ACM Transactions on Graphics (TOG).
- Stefanie Hahmann was a guest Editor of the journal CAD Vol. 78 (Elsevier): Special Issue on Solid and Physical Modeling SPM'16, (eds.) Mario Botsch (Allemagne), Stefanie Hahmann, Scott Schaefer (USA).
- Jean-Claude Léon is an Associate Editor of CAD (Elsevier)

### 8.1.3.2. Reviewer - Reviewing Activities

- Remi Ronfard was a reviewer for the « Computers and Graphics » and « Graphical Models » journals in 2016.
- Stefanie Hahmann was a reviewer for the journals CAGD and CAD
- Jean-Claude Léon was a reviewer for the journal ASME JCISE

### 8.1.4. Invited Talks

Marie-Paule Cani gave the following invited talks

- Towards the Expressive Design of Virtual Worlds: Combining Knowledge and Control. Key-note talk, Eurographics'2016, Lisbon, Portugal, May 2016.
- Expressive 3D Modeling: User-centered models for seamless creation through gestures. Key-note talk, Graphics Interface'2016, Victoria, Canada June 2016
- Modélisation 3D expressive: du design numérique à la création de mondes virtuels animés. 3h talks for the Computer Science students of ENS Paris-Saclay (previously called ENS Cachan)
- Towards the Expressive Design of Virtual Worlds: Combining Knowledge and Control. Inria Sophia Antipolis colloquium series, September 2016.
- Modélisation 3D Expressive : du design numérique à la création de mondes virtuels animés. Invited lecture. l'Université de Corse, Corte, Octobre 2016.
- Expressive 3D modeling: from digital design to the creation of animated virtual worlds. Computer Science colloquium, University Paris VI, November 2016.

Rémi Ronfard gave the following invited talks

- Directing virtual worlds, Xerox Research Center Europe, Meylan.
- The prose storyboard language, a tool for annotating and directing movies, Research seminar on digital images, ENS Ulm, February 11, 2016.
- Directing virtual worlds, Disney Research, Zurich.
- Génération et montage de rushes cinématographiques par analyse vidéo et application aux captations de théâtre. Séminaire en humanités numériques: Valoriser la recherche en arts performatifs par le numérique, Maison des Sciences de l'Homme, Lille, April 18, 2016.
- Can computers pay attention ? Journée d'étude sur Attention humaine / Exo-attention computationnelle (Human Attention / Computational Exo-Attention) at University Grenoble Alpes, October 13, 2016.

### 8.1.5. Scientific Expertise

- Marie-Paule Cani
  - was a reviewer for a consolidator and a starting ERC project.
  - did some consulting for Disney Research, Zurich.
- Remi Ronfard
  - was a reviewer for the AXIOM GAMMA project at the European Commission (review meetings in March and July 2016).
  - was a member of the scientific committee at IMAGINOVE in 2016.
- Stefanie Hahmann
  - was an expert for the Netherlands Organisation for Scientific Research.
  - serves as a member of the Advisory Board (2014-2018) for the Européen Marie-Curie Training Network ARCADES.

### 8.1.6. Research Administration

- Marie-Paule Cani served as first Vice-Chair and chair of the Steering Committee of the Eurographics association.
- Marie-Paule Cani and Rémi Ronfard are elected members of the executive board (CA) of EG-France, the french chapter of Eurographics.
- Marie-Paule Cani became joint director of Laboratoire Jean Kuntzmann from July 2016.
- Damien Rohmer is member of the Conseil d'Administration of Association Française d'Informatique Graphique (AFIG).
- Rémi Ronfard
  - was the Head of the Image and Geometry Department at Laboratoire Jean Kuntzmann until July 2016.
  - is the co-organizer of the action « Visage, geste, action et comportement » at GDR ISIS.
  - has been the head (by interim) of the Imagine team from April 2016.
- Stefanie Hahmann
  - is an elected member of the Executive Committee of SMA (Solid Modeling Association) since 2013.
  - is the head of the French working group "GTMG" (Groupe de travail en Modélisation Géométrique) part of the CNRS GDR IM and GDR IGRV.
  - was member of the Conseil de laboratoire of the LJK lab.

## 8.2. Teaching - Supervision - Juries

### 8.2.1. Teaching

- Marie-Paule Cani is responsible for two courses at Ensimag/Grenoble-INP: 3D Graphics (a course that attracts about 80 master 1 students per year) and IRL (Introduction à la recherche en laboratoire), a course enabling engineering students to work on a personal project in a research lab during one semester, to get an idea of what academic research is.
- Stefanie Hahmann is co-responsible of the department MMIS (Images and Applied Maths) at Grenoble INP with 120 students. (<http://ensimag.grenoble-inp.fr/cursus-ingenieur/modelisation-mathematique-images-simulation-124674.kjsp>)  
 Stefanie Hahmann had teaching load of 192h per year. She is responsible of 3 courses at Ensimag/Grenoble INP: Numerical Methods (240 students, 3rd year Bachelor level), Geometric Modeling (60 students, Master 1st year) and Surface Modeling (30 students, Master 2nd year).
- Olivier Palombi is responsible of the French **Campus numérique** of anatomy. He is responsible and national leader of the project SIDES (<http://side-sante.org/>). All the French medical schools (43) have planed to use the same e-learning framework (SIDES) to manage evaluations (examen) and to create a large shared database of questions.
- François Faure was responsible of the GVR-(Graphics, Vision and Robotic) program in the MOSIG Master.
- Damien Rohmer is coordinator of the Math, Signal, Image program at the engineering school CPE Lyon in supervising the scientific and technical content of the program. He is also co-responsible of the *Image, Modeling & Computing* specialization program attracting 35 students per year. He gives, and is responsible, for of one Computer Science class (130 student, 3rd year Bachelor level), an introductory Computer Graphics class (110 students, Master 1st year), and 5 specialization classes on C++ programming, OpenGL programming, 3D modeling, animation and rendering (35 students, Master 1st and 2nd year). He coordinates the association between CPE and the new computer graphics master program ID3D (Image, Développement et Technologie 3D) from University Lyon1. He also coordinates the association between CPE and the Gamagora computer game project.

- Rémi Ronfard taught courses in Computational modeling of narrative texts, movies and games, MSTII Doctoral School, University Grenoble Alpes (18 hours in March-April 2016); Game Engine Programming, M2R IMAGINA, University of Montpellier (36 hours in October-December 2016) and Advanced 3D animation, M2R MOSIG, University of Grenoble Alpes (12 hours in December 2016).
- Jean-Claude Léon is in charge of the module Mechanical Systems at Grenoble-INP ENSE3 (300 students, 64h, coordination of three courses)
- Frédéric Devernay teaches Computer Science and Algorithmics to L1 and L2 students (Cycle Préparatoire Polytechnique : CPP) at INP Grenoble (50h).

Note that MOSIG is joint master program between University Joseph Fourier (UJF) and Institut Polytechnique de Grenoble (INPG) taught in English since it hosts a number of internal students. It belongs to the doctoral school MSTII.

Most of the members of our team are Professor or Assistant Professor in University where the common teaching load is about 200h per year. Rémi Ronfard who is only researcher usually perform some teaching in vacations.

### 8.2.2. Supervision

- PhD: Léo Allemand-Giorgis. *Reconstruction de surfaces à partir de complexes de Morse-Smale*. Thèse MENRT. October 2012-Juin 2016. Stefanie Hahmann and GP Bonneau (Maverick team).
- PhD: Pierre-Luc Manteaux. *Simulation et contrôle de phénomènes physiques*. Grenoble University. October 2012-September 2016. Marie-Paule Cani and François Faure.
- PhD: Camille Schreck. *Interactive deformation of virtual paper*. Grenoble Université, October 2013 - October 2016. Stefanie Hahmann, Damien Rohmer.
- PhD: Ulysse Vimont. *Novel Methods for the Interactive Design of Complex Objects and Animations* October 2013 - November 2016. Marie-Paule Cani, Damien Rohmer.
- PhD in progress: Romain Brégier (Université de Grenoble Alpes), *Débrassage d'objets à l'aide de bras robotisés*, encadrée par Frédéric Devernay et dirigée par James Crowley (LIG, Grenoble), soutenance prévue en octobre 2017.
- PhD in progress: Guillaume Cordonnier. *Graphical simulation of mountains based on geology*. Grenoble university. October 2015-September 2018. Marie-Paule Cani and Eric Galin.
- PhD in progress: Pablo Coves, *From Point Cloud Data to Functional CAD Model*. Grenoble University. Jean-Claude Léon, Damien Rohmer, Raphaëlle Chaine (LIRIS), Julie Digne (LIRIS).
- PhD in progress: Sébastien Crozet, *Calcul de distance minimale entre solides B-Rep CAO pour des applications de simulations mécaniques temps réelles*, Janvier 2015- Décembre 2017. Frédéric Devernay.
- PhD in progress: Even Entem. *3D modelling from a sketch*. Grenoble University. November 2013-March 2017. Marie-Paule Cani and Loic Barthe (IRIT Toulouse).
- PhD in progress: Amélie Fondevilla. *Sculpting and animating developable surfaces with video embedding*, Thèse MENRT. October 2016 - September 2021. Stefanie Hahmann.
- PhD in progress: Geoffrey Guingo. *Synthesis of animated textures*. Grenoble university. October 2015-September 2018. Marie-Paule Cani, Jean-Michel Dischler and Basile Sauvage.
- PhD in progress: Sandra Nabil (Université de Grenoble Alpes), *Vidéo panoramique 360 degrés à très haute résolution*, encadrée par Frédéric Devernay et dirigée par James Crowley (LIG, Grenoble), soutenance prévue en octobre 2018.
- PhD in progress: Grégoire Niéto (Université de Grenoble Alpes), *Dispositifs de capture de type «caméra plénoptique» pour la vision à grande distance, et algorithmes de traitement et de visualisation*, encadrée par Frédéric Devernay et dirigée par James Crowley (LIG, Grenoble), soutenance prévue en octobre 2017.



- PhD in progress: Robin Roussel. *Function-aware design for objects to be fabricated*. UCL London. October 2015-September 2018. Niloy Mitra, Marie-Paule Cani and Jean-Claude Léon.
- PhD in progress: Tibor Stanko. *Modélisation de surfaces lisses maillées à partir de capteurs inertiels*. Thèse CEA. October 2014- September 2017. Stefanie Hahmann and GP Bonneau.
- M2R: Thibault Blanc-Beyne, Ensimag, Géraldine Morin (ENSEEIH), Stefanie Hahmann
- M2R: Amélie Fondevilla, Ensimag, Stefanie Hahmann, Damien Rohmer
- M2R Maxime Garcia, ENSIMAG/MOSIG, Rémi Ronfard
- M2R: Thibault Lejemble, Ensimag, Stefanie Hahmann, Damien Rohmer
- M2R: Kevin Le Run, L3, ENS Cachan, Rémi Ronfard
- M2R: Estelle Noé, ParisTech et KTH, Damien Rohmer, Stefanie Hahmann, Marie-Paule Cani
- M2R: Aymeric Séguret, M2GICAO, Jean-Claude Léon,

### 8.2.3. *Juries*

- Marie-Paule Cani was member of the PhD committees of Elisabeth Rousset (Equipe IHM, UGA), Yoann Weber (Université de Limoges), and Hamza Chouh (CEA Saclay - Université de Lyon).
- Remi Ronfard was a reader (rapporteur) for the PhD thesis of Fabio Zund, Augmented reality storytelling, ETH Zurich, October 2016.
- Stefanie Hahmann was a reviewer (rapporteur) for the PhD thesis of Florian Canezin (Univ. Toulouse), Hoang Ha Nguyen (Université Aix-Marseille) and Ngels Cervero (UPC Universitat Politècnica de Catalunya, Barcelona).
- Jean-Claude Léon was reviewer (apporteur) for the PhD thesis of Lei Zhang (Ecole Centrale Marseille)

## 8.3. Popularization

Marie-Paule Cani

- “Façonner l’Imaginaire. . .”: Towards the Expressive Design of Animated Virtual Worlds “Imagination Week de l’ESSEC, Paris, Janvier 2016.
- Formes, mouvements, et mondes virtuels. . . Quel média pour façonner l’imaginaire ? Forum des savoirs, Rouen, 2016. Exposé également donné à l’Institut de Biologie de Paris VI, octobre 2016.
- participation to a Round Table within the conference: “Mathématiques Oxygène du Numérique”, Paris, November 2016.

Damien Rohmer gave a presentation on

- Researches and applications in Computer Graphics to ENS Lyon students.
- Scientific image production to mathematiciens scientists at the MMI (Maison des Mathématiques et de l’Informatique) in Lyon.
- Garment and developable surface modeling at the R3iLab (Réseau innovation immatérielle pour l’industrie).

Rémi Ronfard

- Eye tracking and the arts. Invited talk at Experimenta, Grenoble, October 2016.
- Artificial Intelligence and the arts. Invited talk at Atelier Arts et Science, CEA/Hexagone, Grenoble, October 2016.

## **MANAO Project-Team**

# **10. Dissemination**

## **10.1. Promoting Scientific Activities**

### **10.1.1. Scientific Events Organisation**

#### *10.1.1.1. Member of the Organizing Committees*

Expressive 2016 (NPAR-SBIM-CAe), Workshop on NanoAppearance

### **10.1.2. Scientific Events Selection**

#### *10.1.2.1. Member of the Conference Program Committees*

ACM Siggraph 2016, ACM Siggraph Asia 2016, Symposium on Geometry Processing (SGP) 2016, Geometric Modeling and Processing (GMP) 2016, SIBGRAPI (Conference on Graphics, Patterns and Images) 2016

#### *10.1.2.2. Reviewer*

Eurographics 2016, Pacific Graphics 2016, High Performance Graphics 2016

### **10.1.3. Journal**

#### *10.1.3.1. Reviewer - Reviewing Activities*

ACM Transactions on Graphics (TOG), IEEE Transactions on Visualization and Computer Graphics (TVCG), Computer Graphics Forum (CGF),

### **10.1.4. Invited Talks**

Implicit Skinning : une méthode d'animation de personnages interactive avec contacts et étirements de la peau. Rencontres Animation Développement Innovation (RADI).

### **10.1.5. Research Administration**

Inria Evaluation Committee

## **10.2. Teaching - Supervision - Juries**

### **10.2.1. Teaching**

The members of our team are involved in teaching computer science at University of Bordeaux, ENSEIRB Engineering School, and Institut d'Optique Graduate School (IOGS). General computer science is concerned, as well as the following graphics related topics:

Master : Pierre Bénard, Gaël Guennebaud, Romain Pacanowski, Advanced Image Synthesis, 60 HETD, M2, Univ. Bdx, France.

Master : Gaël Guennebaud, Numerical Techniques, 45 HETD, M1, IOGS, France

Master : Xavier Granier, Image Synthesis, 14 HETD, M2, IOGS, France

Master : Gaël Guennebaud, Geometric Modeling, 22 HETD, M2, IOGS, France

Master : Romain Pacanowski, Thibaud Lambert, Antoine Lucat & Brett Ridel, Algorithmic and Object Programming, 60 HETD, M1, IOGS, France

Master : Xavier Granier, Romain Pacanowski, Colorimetry and Appearance Modeling, 20 HETD, M1, IOGS, France.

Master : Gaël Guennebaud and Pierre Bénard, High-performance 3D Graphics, 60 HETD, M1, Univ. Bdx and IOGS, France.

Master : Pierre Bénard, Virtual Reality, 24 HETD, M2, Univ. Bdx, France.

Master : Ivo Ihrke, Advanced Display Technology, 12 HETD, M1, IOGS, France

Master : Pierre Bénard, Image Synthesis and 3D modeling, 60 HETD, M2, ENSEIRB, France

Licence : Patrick Reuter, Digital Imaging, 36 HETD, L3, Univ. Bdx, France.

Some members are also in charge of some fields of study:

Master : Xavier Granier, M2, IOGS (Bordeaux), France.

License : Patrick Reuter, Science and Modeling, L2, Univ. Bdx, France.

### **10.2.2. Supervision**

PhD : Boris Raymond, Rendering and manipulation of anisotropic materials, Univ. Bordeaux, P. Barla & G. Guennebaud & X. Granier

PhD : John Restrepo, Plenoptic Imaging and Computational Image Quality Metrics, Inria & Univ. Bordeaux, I. Ihrke

PhD : Brett Ridel, Interactive spatial augmented reality, Inria & Univ. Bordeaux, P. Reuter & X. Granier

PhD : Carlos Zubiaga Pena, Image-space editing of appearance, Inria & Univ. Bordeaux, P. Barla & X. Granier

PhD : Florian Canezin, Implicit Modeling, Univ. Toulouse III, G. Guennebaud & Loic Barthe

PhD : Arthur Dufay, Adaptive high-quality of virtual environments with complex photometry, Technicolor & Univ. Bordeaux, J.-E. Marvie R. Pacanowski & X. Granier

PhD : Thibaud Lambert, Real-time rendering of highly detailed 3D models, Inria & Univ. Bordeaux, G. Guennebaud & P. Bénard

PhD : Loïs Mignard-Debize, Plenoptic function and its application to spatial augmented reality, Inria & Univ. Bordeaux, P. Reuter & I. Ihrke

PhD : Antoine Lucat, Appearance Acquisition and Rendering, IOGS & Univ. Bordeaux, R. Pacanowski & X. Granier

PhD : David Murray, Expressive Rendering of Volumetric Data, FEI & Univ. Bordeaux, J. Baril & X. Granier

## **MAVERICK Project-Team**

# **9. Dissemination**

## **9.1. Promoting Scientific Activities**

### **9.1.1. Scientific Events Selection**

#### *9.1.1.1. Member of the Conference Program Committees*

- Nicolas Holzschuch was a member of the International Program Committee of the Eurographics Symposium on Rendering (EGSR) 2016, the ACM Symposium on Interactive 3D Graphics (I3D) 2016 and 2017, and SIBGRAPI 2016.
- Cyril Soler was a member of the International Program Committee of the Eurographics Symposium on Rendering (EGSR) 2016
- Joëlle Thollot was a member of the International Program Committee of Expressive'2016

#### *9.1.1.2. Reviewer*

All members of the Maverick team work as reviewers for the most prestigious conferences, including Siggraph, Eurographics, the EG symposium on rendering.

### **9.1.2. Journal**

#### *9.1.2.1. Reviewer - Reviewing Activities*

All members of the Maverick team work as reviewers for the most prestigious journals, including ACM TOG, IEEE TVCG, etc.

### **9.1.3. Invited Talks**

- Fabrice Neyret, Feb 2, 2016. Victoria University, New-Zeland
- Cyril Soler, Nov, 2015. University of Montreal.

### **9.1.4. Research Administration**

Nicolas Holzschuch is an elected member of Inria Evaluation Committee (CE), an elected member of Inria Comité Technique (CTI) and a reserve member of Inria Scientific Council (CS).

## **9.2. Teaching - Supervision - Juries**

### **9.2.1. Teaching**

Joëlle Thollot and Georges-Pierre Bonneau are both full Professor of Computer Science. Romain Vergne is an associate professor in Computer Science. They teach general computer science topics at basic and intermediate levels, and advanced courses in computer graphics and visualization at the master levels. Nicolas Holzschuch teaches advanced courses in computer graphics at the Master level. In addition, Romain Vergne taught an advanced course on "perception & graphics" at the spring school of Ôkhra (Roussillon).

- Licence: Joëlle Thollot, Automates finis, 27h, L3 cursus alternance, ENSIMAG, France
- Licence: Joëlle Thollot, Théorie des langages, 18h, L3, ENSIMAG, France
- Master: Joëlle Thollot, Responsable du cursus en alternance, 48h, L3-M1-M2, ENSIMAG, France
- Master: Joëlle Thollot, Tutorat d'apprentis, 48h, L3-M1-M2, ENSIMAG, France

### 9.2.2. Supervision

- PhD in progress: Guillaume Loubet, *Représentations efficaces de l'apparence sous-pixel*, Université de Grenoble, October 2010, Fabrice Neyret
- PhD defended: Léo Allemand-Giorgis, *Visualisation de champs scalaires guidée par la topologie*, October 2012, Georges-Pierre Bonneau, Stefanie Hahmann. Defense
- PhD in progress : Aarohi Johal, *Algorithmes de génération automatique d'arbres de construction à partir de modèles géométriques CAO B-Rep*, September 2013, Jean-Claude Léon, Georges-Pierre Bonneau, thèse CIFRE EdR R&D.
- PhD in progress : Benoit Arbelot, *Etudes statistiques de forme, de matériaux et d'environnement pour la manipulation de l'apparence*, October 2013, Joëlle Thollot, Romain Vergne.
- PhD in progress: Alexandre Bleron, *Stylization of animated 3D scenes in a painterly style*, October 1, 2015, Joëlle Thollot, Romain Vergne, Thomas Hurtut.

### 9.2.3. Juries

- Nicolas Holzschuch was in the jury for the PhD defenses of Boris Raymond (Bordeaux), Thomas Subileau (Toulouse), and the "HDR" of Lionel Simonot (Physique, Poitiers).
- Joëlle Thollot has been a member of the jury for the PhD of Pierre-Luc Manteaux (Oct 2016 - UGA), Ulysse Vimont (dec 2016 - UGA), Jordane Suarez (dec 2016 - Paris 8).

## 9.3. Popularization

Every year, "MobiNet" (see section 4.5) classes are conducted with high school pupils of the large Grenoble area to practice initiation and intuition on Computer Science, Maths and Physics. Depending on the year, we have 2 to 4 groups in the scope of INP-Grenoble "Engineering weeks", and 0 to 2 groups in the scope of Math-C2+ operations.

## MIMETIC Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. General Chair, Scientific Chair

Marc Christie, Program chair of Motion in Games 2015 (but held in 2016)

#### 10.1.1.2. Member of the Organizing Committees

Antonio Mucherio, organiser of Distance Geometry Day 2016, Rennes, France, December 2016

Anne-Hélène Olivier, co-chair of Workshop VHCIE 2016, IEEE VR 2016, Greenville, United-States, October 2016

Marc Christie, steering committee of Motion in Games 2015 and 2016, co-chair of WICED 2016 (Eurographics Workshop on Intelligent Cinematography and Editing)

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Member of the Conference Program Committees

Marc Christie

ACM Motion in Games MIG 2016, San Francisco, United-States, October 2016

ACM Symposium on Computer Animation 2016, Zurich, Switzerland, July 2016

Ludovic Hoyet

ACM Motion in Games MIG 2016, San Francisco, United-States, October 2016

ACM Symposium on Applied Perception 2016, Los Angeles, United-States, July 2016

International Conference on Computer Graphics Theory and Applications 2017, Porto, Portugal, February 2017

Richard Kulpa

International Conference on Computer Graphics Theory and Applications 2017, Porto, Portugal, February 2017

Franck Multon

ACM Motion in Games MIG 2016, San Francisco, United-States, October 2016

Computer Animation and Social Agents CASA 2016, Geneva, Switzerland, May 2016

Anne-Hélène Olivier

ACM Motion in Games MIG 2016, San Francisco, United-States, October 2016

#### 10.1.2.2. Reviewer

Marc Christie

Eurographics, Lyon, France, April 2017

ACM CHI, Denver, United-States, May 2017

ACM Siggraph, Anaheim, United-States, July 2016

Eurographics 2017, CHI 2017, Siggraph 2017,

Ludovic Hoyet

ACM Siggraph, Anaheim, United-States, July 2016  
ACM SigChi, San Jose, United-States, May 2016  
Eurographics, Lyon, France, April 2017  
IEEE VR 2017, Los Angeles, United-States, March 2017  
Pacific Graphics, Okinawa, Japan, October 2016

Richard Kulpa

IEEE International Conference on Automatic Face and Gesture Recognition, 2017

Franck Multon

IEEE VR 2017, Los Angeles, United-States, March 2017

Anne-Hélène Olivier

IEEE VR 2017, Los Angeles, United-States, March 2017  
ACM Siggraph, Anaheim, United-States, July 2016  
ACM Siggraph Asia 2016, Macao, China, December 2016

Charles Pontonnier

ACM VRST 2016, Munich, Germany, November 2016

### **10.1.3. Journal**

#### *10.1.3.1. Member of the Editorial Boards*

Marc Christie, Associate Editor of the Visual Computer  
Armel Crétual, Editorial board of Journal of Electromyography and Kinesiology  
Franck Multon, Presence, MIT Press

#### *10.1.3.2. Reviewer - Reviewing Activities*

Marc Christie

IEEE Transactions on Visualization and Computer Graphics, The Visual Computer, Computer Graphics Forum

Armel Crétual

Journal of Electromyography and Kinesiology, British Medical Journal open, Clinical Biomechanics, Journal of Orthopaedic Research, IEEE Computer Graphics and Applications

Ludovic Hoyet

IEEE Transactions on Visualization and Computer Graphics, IEEE Computer Graphics & Applications, Computer & Graphics, The Visual Computer Journal, Computer Animation and Virtual Worlds

Richard Kulpa

Journal of Sports Engineering and Technology, Computer

Antonio Mucherino

Mathematical Programming Series A and B, Springer, October 2016.

Franck Multon

Journal Applied Ergonomics, IEEE Transaction on Haptics, IEEE Trans. on Visualization and Computer Graphics, ACM Transactions on Applied Perception, IEEE Computer Graphics and Applications, International Journal of Computer Games Technology

Anne-Hélène Olivier

Journal of Experimental Psychology Human Perception and Performance

Charles Pontonnier

Applied Ergonomics, IEEE Computer Graphics and Applications, MDPI Computers, IEEE Transactions on Visualization and Computer Graphics, ACM Computing surveys

#### **10.1.4. Invited Talks**

Ludovic Hoyet. Perception of Biological Human Motion for Plausible Character Animation. Invited speaker at Université Bretagne Sud, team Expression, Vannes, France, June 2016

Antonio Mucherino. Vertex Orders in Distance Geometry. Invited seminar at LIA, University of Avignon, France. Invited by R. Figueiredo. November 2016.

#### **10.1.5. Scientific Expertise**

Marc Christie, expert for CIR (credit impot recherche – three cases in 2016)

Georges Dumont, expert for Dutch Research Council VENI (Netherlands) project

Franck Multon, HCERES expert for UMR 7287 AMU/CNRS "Institut des Sciences du Mouvements" in Marseille en 2016-2017, ANR expert, member of the ANR CPDS 4 "Santé Bien-être" through the Allistene national Alliance to design the next ANR call for projects, expert for international NSRC (Canada), CRSNG (Canada) and Dutch Research Council VENI (Netherlands) projects

Charles Pontonnier, Member of the Normalization Work Group "Impact of exoskeletons on work conditions", groupe AFNOR.

#### **10.1.6. Research Administration**

Georges Dumont is president of the elected group at scientific council of École Normale Supérieure de Rennes, member of the scientific council of École Normale Supérieure de Rennes

Georges Dumont is scientific head of Immerstar platforms (Immersia + Immermove) jointly for Inria and Irisa Partners

Ludovic Hoyet participated in the local MESR PhD Grant Auditions 2016

Richard Kulpa is member of the University Rennes2 Research steering committee "commission recherche", and Academic Council "CAC"

Fabrice Lamarche is a member of the national council of universities (Conseil National des Universités - CNU) since november 2015

Antonio Mucherino is the person in charge of International Relationships at ISTIC, and member of the "Commission Affaires Internationales" at Université Rennes 1

Franck Multon, member of the "Conseil Académique" and "Commission Recherche" of University Rennes2, head of Immermove platform in the Immerstar group, member of the D6 "Media and Interactions" department in IRISA, head of MimeTIC team

## **10.2. Teaching - Supervision - Juries**

### **10.2.1. Teaching**

#### **10.2.1.1. Master**

Marc Christie

"Multimedia Mobile", Master 2, leader of the module, 32h, Computer Science, University of Rennes 1, France

"Projet Industriel Transverse", Master 2, 32h, leader of the module, Computer Science, University of Rennes 1, France

"Outils pour la Conception d'IHM", Master 2, 32h, leader of the module, Computer Science, University of Rennes 1, France



**Armel Crétual**

"Méthodologie", leader of the module, 20h, Master 1 M2S, University Rennes2, France

"Biostatistiques", leader of the module, 30h, Master 2 M2S, University Rennes2, France

**Georges Dumont**

Responsible of the second year of the master Mechatronics, Rennes 1 University and École Normale Supérieure de Rennes, France

"Mechanical simulation in Virtual Reality", 36h, Master Mechatronics, Rennes 1 University and École Normale Supérieure de Rennes, France

"Mechanics of deformable systems", 40h, Master FE, École Normale Supérieure de Rennes, France

"Oral preparation to agrégation competitive exam", 20h, Master FE, École Normale Supérieure de Rennes, France

"Vibrations in Mechanics", 10h, Master FE, École Normale Supérieure de Rennes, France

"Multibody Dynamics", 9h, Master FE, École Normale Supérieure de Rennes, France

"Finite Element method", 12h, Master FE, École Normale Supérieure de Rennes, France

**Ronan Gagne**

"VR projects", 40h, M1/M2, INSA Rennes, France

**Ludovic Hoyet**

"Images et Mouvement - IMO", Part "Mouvement Humain", 10h, Master 2 research in computer sciences, University Rennes1, France

**Richard Kulpa**

"Boucle analyse-modélisation-simulation du mouvement", 27h, leader of the module, Master 2 M2S, Université Rennes 2, France

"Méthodes numériques d'analyse du geste", 27h, leader of the module, Master 2 M2S, Université Rennes 2, France

"Cinématique inverse", 3h, leader of the module, Master 2 M2S, Université Rennes 2, France

**Fabrice Lamarche**

"Compilation pour l'image numérique", 29h, Master 1, ESIR, University of Rennes 1, France

"Synthèse d'images", 12h, Master 1, ESIR, University of Rennes 1, France

"Synthèse d'images avancée", 28h, Master 1, ESIR, University of Rennes 1, France

"Modélisation Animation Rendu", 36h, Master 2, ISTIC, University of Rennes 1, France

"Jeux vidéo", 26h, Master 2, ESIR, University of Rennes 1, France

**Antonio Mucherino**

"Parallel Computing" (in English), 30h, M1 Informatique, Université Rennes 1, France

"Introduction aux Systèmes et Réseaux", 42h, M1 BIG (SVE), Université Rennes 1, France

"Programmation Orienté à Objets", 40h, M1 BIG (SVE), Univ. Université Rennes 1, France

"Algorithmes pour les Séquences et les Structures", 12h, M2 BIG (SVE), Université Rennes 1, France

**Franck Multon**

"Images et Mouvement - IMO", leader of the module, 20h, Master 2 research in computer sciences, University Rennes1, France

"Santé et Performance au Travail : étude de cas", leader of the module, 30h, Master 1 M2S, University Rennes2, France

"Analyse Biomécanique de la Performance Motrice", leader of the module, 30h, Master 1 M2S, University Rennes2, France

"Modélisation et Simulation du Mouvement", leader of the module, 30h, Master 2 M2S, University Rennes2, France

"Connaissances neurophysiologiques et biomécaniques", Mastere "Excellence Operationnelle", INSA Rennes, France

Anne-Hélène Olivier

"Biostatistiques", 18h, Master 2 M2S, University Rennes2, France

"Biostatistiques", 16h, Master 1 2SEP, École Normale Supérieure de Rennes, France

"Contrôle moteur : loi de contrôle de la locomotion", 3h30, Master 1 M2S, Université Rennes 2, France

"Contrôle moteur : Boucle perceptivo-motrice", 3h30, Master 1 M2S, Université Rennes 2, France

"Analyse Biomécanique de la Performance Motrice", 15h, Master 1 M2S, University Rennes2, France

Charles Pontonnier

"Numerical methods", leader of the module, Mechanics, École Spéciale Militaire de Saint-Cyr Coëtquidan, France

"Numerical simulation of mechanical systems", leader of the module, Mechanics, École Spéciale Militaire de Saint-Cyr Coëtquidan, France

"Analytical Mechanics", Mechanics, École Spéciale Militaire de Saint-Cyr Coëtquidan, France

"Design and control of legged robots", leader of the module, Electronics, École Spéciale Militaire de Saint-Cyr Coëtquidan, France

"Design, simulation and control of mechanical systems", leader of the module, Lecturers training in mechatronics, École Normale Supérieure de Rennes, France

"Musculoskeletal modeling and ergonomics", 30h, Master 1 M2S, University Rennes2, France

#### 10.2.1.2. License level

Marc Christie

"Programmation Impérative 1", leader of the module, University of Rennes 1, France

Armel Créteil

"Analyse cinématique du mouvement", 100h, Licence 1, University Rennes 2, France

Richard Kulpa

"Biomécanique (dynamique en translation et rotation)", 48h, Licence 2, Université Rennes 2, France

"Méthodes numériques d'analyse du geste", 48h, Licence 3, Université Rennes 2, France

"Statistiques et informatique", 15h, Licence 3, Université Rennes 2, France

Ronan Gagne

"VR projects", 10h, L3, INSA Rennes, France

Fabrice Lamarche

"Initiation à l'algorithmique et à la programmation", 56h, License 3, ESIR, University of Rennes 1, France

"Programmation en C++", 46h, License 3, ESIR, University of Rennes 1, France

"IMA", 24h, License 3, ENS Rennes, ISTIC, University of Rennes 1, France

Antonio Mucherino

"Programmation Impérative 1", 80h, L1, Université Rennes 1, France

Franck Multon

"Ergonomie du poste de travail", Licence STAPS L2 & L3, University Rennes2, France

Anne-Hélène Olivier

"Analyse cinématique du mouvement", 100h , Licence 1, University Rennes 2, France

"Anatomie fonctionnelle", 8h , Licence 2, University Rennes 2, France

"Effort et efficacité", 12h , Licence 2, University Rennes 2, France

"Locomotion et handicap", 12h , Licence 3, University Rennes 2, France

"Biomécanique du vieillissement", 12h , Licence 3, University Rennes 2, France

Charles Pontonnier

"Numerical control", leader of the module, Electronics, École Inter-Armes de Saint-Cyr Coëtquidan, France

### 10.2.2. Supervision

#### 10.2.2.1. PhD (defended)

Julien Bruneau, Studying and modeling complex interactions for crowd simulation, University Rennes 1, defended in Nov. 2016, Julien Pettré (Lagadic) & Anne-Hélène Olivier

Ana Lucia Cruz Ruiz, Low-Dimensional Control Representations for Muscle-Based Characters: Application to Overhead Throwing, ENS Rennes, defended in Dec. 2016, Georges Dumont & Charles Pontonnier

Pierre Plantard, Estimation des efforts musculaires à partir de données in situ pour l'évaluation ergonomique d'un poste de travail, defended in July 2016, Franck Multon & Anne-Sophie LePierres

Cunka Sanokho, Data-driven Virtual Cinematography, University Rennes1, defended in Feb. 2016, Marc Christie

Hui-yin Wu, Cinematic discourse for Interactive 3D Storytelling, University Rennes1, defended in Oct. 2016, Marc Christie

#### 10.2.2.2. PhD (in progress)

Yacine Bouhalia, Approche transversale pour l'analyse et la reconnaissance de gestes 2D et 3D, INSA of Rennes, September 2015, Richard Kulpa & Franck Multon & Eric Anquetil

Charles Faure, Stratégies coopératives et compétitives dans des tâches d'interactions physiques multiples, Université Rennes 2, September 2016, Benoit Bideau & Richard Kulpa

Florence Gaillard, Evaluation en situation écologique des capacités fonctionnelles des membres supérieurs d'enfants hémiplésiques, University Rennes 2, December 2015, Armel Créteil & Isabelle Bonan

Karim Jamal, Les effets des stimulations sensorielles par vibration sur les perturbations posturales secondaires à des troubles de la cognition spatiale après un Accident vasculaire Cérébrale, University Rennes 2, September 2016, Isabelle Bonan & Armel Créteil

Sean D. Lynch, Perception visuelle du mouvement humain dans les interactions lors de tâches locomotrices, M2S - University Rennes 2, September 2015, Anne-Hélène Olivier & Richard Kulpa

Marion Morel, Suivi et étude des interactions pour l'analyse des tactiques durant un match de basket-ball, UPMC - University Rennes 2, September 2014, Catherine Achard & Séverine Dubuisson & Richard Kulpa

Antoine Muller, Design of a modular and multiscale musculoskeletal library as a support to motion analysis-synthesis, Ecole normale supérieure, September 2014, Georges Dumont & Charles Pontonnier

Camille Pouliquen, Optimization of musculoskeletal models during the sporting gesture: Cycling application, University Rennes 2, September 2013, Paul Delamarche & Nicolas Bideau

Pierre Touzard, Suivi longitudinal du service de jeunes joueurs de tennis élite : identification biomécanique des facteurs de performance et de risque de blessures, University Rennes 2, September 2014, Benoit Bideau & Richard Kulpa & Caroline Martin

### **10.2.3. Juries**

PhD: Deep Seth, Contribution to the evaluation of muscle fatigue model and recovery model, Centrale Nantes, Rapporteur Franck Multon

PhD: Pamela Carreno Medrano, Analysis and Synthesis of Expressive Theatrical Movements, Université Bretagne Sud, Rapporteur Franck Multon

### **10.3. Popularization**

Franck Multon managed a 4 days Booth to present ergonomic work in MIDEEST in Paris, with a plenary session conference about penibility at work, MIDEEST December 2016

Franck Multon and Richard Kulpa managed a 2 days Inria Booth to present VR and Sports in Futur en Seine in Paris, June 2016

Ludovic Hoyet, Journées Scientifiques Inria 2016, exposé court en 180s, “Perceptual Effect of Shoulder Motions on Crowd Animations”.

Ludovic Hoyet, Press conference, « Six-Finger Illusion : pour mieux comprendre la perception de notre corps et de notre avatar ». With Ferran Argelaguet and Anatole Lécuyer, Inria, Paris, 12 May 2016, <https://www.inria.fr/centre/rennes/actualites/six-finger-illusion>

## MINT Project-Team

## 9. Dissemination

### 9.1. Promoting Scientific Activities

#### 9.1.1. Scientific Events Selection

##### 9.1.1.1. Member of the Conference Program Committees

Laurent Grisoni : PC for VISIGRAPP (IEEE InfoViz Art Track), Computer Graphics International (CGI, computer graphics), MOCO (international workshop on gesture), ISEA (art-science), GRAPP (computer graphics)

##### 9.1.1.2. Reviewer

Florent Berthaut: Reviewer for ACM CHI Conference and NIME conference  
Laurent Grisoni: Eurohaptics, ACM UIST, ACM CHI

#### 9.1.2. Journal

##### 9.1.2.1. Member of the Editorial Boards

Frédéric Giraud is Associate Editor of IEEE Transactions on Haptics

##### 9.1.2.2. Reviewer - Reviewing Activities

Florent Berthaut: Reviewer for IEEE Multimedia  
Laurent Grisoni: Computer & Graphics,

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

- Licence: Florent Berthaut, Spreadsheets et VBA programming, LEA L3 TCI (22h), Web programming, LEA L3, Université Lille 3, France
- Licence: Frédéric Giraud, Physique pour le génie électrique (30h), Université Lille 1
- Master: Christophe Giraud-Audine: Control of electrical machines (30h), Power Electronics (30h), signal processing (30h), niveau M1, ENSAM, France
- Master: Florent Berthaut, Web programming, LEA M1 TSM (16,5h) and LEA M1 RIC1 (48h), Database, LEA M1 ANI (22h), Université Lille 3, France
- Master : Frédéric Giraud, Control of electrical machines (30h), Power Electronics (40h) niveau M1, Université Lille1, France
- Master : Laurent Grisoni, NIHM : nouvelles Interactions Homme-Machine, (6h), niveau M2, Université Lille 1, France
- Master: Laurent Grisoni, représentation et compression de données (24h), introduction à la programmation (38h), cryptographie (8h), Ecole Polytech'lille (dept IMA)
- Master: Laurent Grisoni: gestion de projet en Co-design interdisciplinaire, Master Sciences et Culture du Visuel, Université de Lille Sciences Humaines et Sociales, Master Sciences et Cultures du Visuel (12h)
- Master : Laurent Grisoni, IHM et Interface à Gestes, (24h), niveau M2 (IMA5), Polytech Lille, France

### 9.2.2. Supervision

- PhD : Ehsan Enferad, Modélisation et Commande d'une Interface Tactile à Stimulation Hybride par Modulation de Friction et Retourneement Temporel, nov. 2015, F. Giraud, C. Giraud-Audine
- PhD in progress: Cagan Arslan, Fusion de données pour l'interaction homme-machine, oct. 2015, L. Grisoni/J. Martinet
- PhD in progress: Farzan Kalantari, Interaction sur dispositif à retour tactile et kinesthésique, oct. 2014, L. Grisoni, F. Giraud
- PhD Sofiane Ghenna, Contrôle multimodal d'actionneurs piézo-électriques pour applications tactiles, F.Giraud, C.Giraud-Audine, University Lille1, 30th November 2016
- PhD Thomas Sednaoui, Tactile feedback integration on mobile communication devices, B Semail, F Casset, University Lille1, 14th dec. 2016
- PhD : Eric Vezzoli, Tactile feedback devices: friction control and texture generation, University Lille1, 22 Sept 2016, B. Lemaire-Semail, F. Giraud
- PhD in progress: Hanae Rateau, l'interaction esquissée, oct. 2012, L. Grisoni
- PhD in progress: Vincent Gouezou: L'architecte et ses outils, au travers de l'histoire et dans sa relation actuelle au numérique, oct. 2014, L. Grisoni 25% (with F. Vermandel, architect, Lille school of architecture)
- PhD in progress: Charlotte Planckeel, Le sens de la lacunae en archéologie de l'Âge du bronze, archéologie et outils numériques, L. Grisoni (25%, with A. Lehoerff, Lille 3, archeologist)
- PhD in progress: Olivier Capra, Interaction de présentation, oct. 2016, L. Grisoni, F. Berthaut

### 9.3. Popularization

- Futur en Seine (Paris, 9-10 june 2016; <http://www.futur-en-seine.paris/>). Presentation of E-Vita.
- Nuit des bibliothèques (Lille, 15th october 2016, <http://www.bm-lille.fr/nuit-des-bibliotheques.aspx>). Presentation of the haptic book to the readers of the public library.
- Forum du CNRS (Lille, 19th November 2016, <http://leforum.cnrs.fr/>). Presentation of 2 demos.
- Nuit des partenaires (Lille, 29th november 2016, <https://www.univ-lille.fr/soireepartenaires/>). Présentation of the Haptic book.
- Salon Humanités connectées, Toulouse, dec. 2016.
- Rencontres Inria Entreprises (25 novembre 2016), imaginarium.
- journées RV en haut de france, 24 novembre 2016, imaginarium.
- tables ronde journées régionales de l'innovation, amiens, 20 novembre 2016.
- BOEUF project workshops. Introduction to PureData and digital orchestras @ La condition publique (Roubaix) and l'Imaginarium (Tourcoing) <http://www.cristal.univ-lille.fr/oeuvres-et-recherches/2016/11/28/workshop-les-orchestres-numeriques-espace-recherche-scv/>

## Mjolnir Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. General Chair, Scientific Chair

- **VISAP** (IEEE): Fanny Chevalier (general co-chair)
- Rencontre Inria Industrie “**Interactions avec les objets et services numériques**”: Nicolas Roussel (scientific chair)

#### 10.1.1.2. Member of the Organizing Committees

- **IHM**: Fanny Chevalier (Work-in-Progress co-chair), Stéphane Huot (AFIHM’s 20<sup>th</sup> anniversary co-chair)

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Member of the Conference Program Committees

- **CHI** (ACM): Géry Casiez (associate chair), Nicolas Roussel (associate chair)
- **UIST** (ACM): Fanny Chevalier (associate chair), Géry Casiez (associate chair)
- **Infovis** (IEEE): Fanny Chevalier (PC member)
- **MobileHCI** (ACM): Sylvain Malacria (associate chair)
- **IHM**: Fanny Chevalier (PC member)

#### 10.1.2.2. Reviewer

- **SIGGRAPH** (ACM): Fanny Chevalier
- **UIST** (ACM): Sylvain Malacria, Thomas Pietrzak
- **IHM**: Sylvain Malacria
- **GI** (ACM): Sylvain Malacria
- **TEI** (ACM): Thomas Pietrzak
- **MobileHCI** (ACM): Thomas Pietrzak
- **Haptic Symposium** (IEEE): Thomas Pietrzak

### 10.1.3. Journal

#### 10.1.3.1. Reviewer - Reviewing Activities

- **Transactions on Computer Human Interaction** (ACM): Sylvain Malacria, Géry Casiez, Thomas Pietrzak
- **Transactions on Visualization and Computer Graphics** (IEEE): Fanny Chevalier
- **Information Design Journal** (John Benjamins Publishing Company): Fanny Chevalier
- **Interacting with Computers** (Oxford Journals): Thomas Pietrzak

### 10.1.4. Invited Talks

- *Direct spacetime sketching and editing of visual media*, Microsoft Research, Redmond: Fanny Chevalier
- *Opportunities and limits of Adaptive User Interfaces*, Technology and Routines workshop, Bavarian Academy of Sciences and Humanities, Munich, Germany: Sylvain Malacria

- *Towards the full experience of playing drums on a virtual drumkit*, Symposium on Haptic and Music, McGill University, Montréal, Canada: Thomas Pietrzak

### 10.1.5. Scientific Expertise

- PICOM competitiveness cluster: Nicolas Roussel (scientific board member)
- Agence Nationale de la Recherche: Fanny Chevalier (committee member for the *JCJC*, *PRCE* and *PRC* programs)
- European Research Council: Géry Casiez (reviewer for the Starting Grant program)

### 10.1.6. Research Administration

For Inria:

- **Evaluation committee**: Nicolas Roussel (member)
- Gender equity and equality committee: Nicolas Roussel (member)
- Strategic orientation committee for the information system (COSS scientifique): Nicolas Roussel (member)
- International relations working group (COST-GTRI): Stéphane Huot (member)

For Inria Lille – Nord Europe:

- Scientific officer (délégué scientifique): Nicolas Roussel
- Research jobs committee (CER): Fanny Chevalier (member), Nicolas Roussel (member)
- Technical development committee (CDT): Nicolas Roussel (member)
- Consultative committee (Comité de centre): Fanny Chevalier (member)
- Operational legal and ethical risk assessment committee (COERLE): Stéphane Huot (local correspondent)
- Support to researchers (accompagnement des chercheurs): Stéphane Huot (adviser)
- Activity reports (RAweb): Nicolas Roussel (local correspondents)

For the CRISAL lab of Univ. Lille 1:

- Laboratory council: Géry Casiez (elected member)

### 10.1.7. Learned societies

- **Association Francophone d'Interaction Homme-Machine** (AFIHM): Géry Casiez (board member, president), Stéphane Huot (board member and scientific council member), Thomas Pietrzak (board member)

### 10.1.8. Hiring committees

- Inria's eligibility jury for senior researcher positions (DR2): Nicolas Roussel
- Inria's eligibility jury for junior researcher positions (CR2) in Saclay: Nicolas Roussel
- ENAC's hiring committee for an assistant professor position: Nicolas Roussel
- Polytech Nantes' hiring committee for a Computer Science Assistant Professor position: Fanny Chevalier (member)

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

- Master Informatique *Image Vision Interaction (IVI)*: Géry Casiez (16 hrs), Fanny Chevalier (16 hrs), Thomas Pietrzak (16 hrs), *NIHM : Nouvelles Interactions Homme-Machine*, M2, Univ. Lille 1
- Master Informatique: Thomas Pietrzak (50 hrs), Sylvain Malacria (30 hrs), Nicolas Roussel (8 hrs), *IHM : Interactions Homme-Machine*, M1, Univ. Lille 1



- Master Informatique: Géry Casiez, *Multi-Touch Interaction*, 10 hrs, M1, Univ. Lille 1
- Master: Géry Casiez (6 hrs), Thomas Pietrzak (10.5 hrs), *3DETech : 3D Digital Entertainment Technologies*, M2 level, Télécom Lille
- Master Sciences Humaines et Sociales *Réseaux Sociaux Numériques (RSN)*: Fanny Chevalier, *Statistiques et visualisation de données*, 8hrs, M2, Univ. Lille 1
- Master Sciences Humaines et Sociales *Réseaux Sociaux Numériques (RSN)*: Fanny Chevalier, *Outils et pratiques numériques*, 6hrs, M1, Univ. Lille 1
- Master Computing for Medicine: Fanny Chevalier, *Information Visualization in Medicine*, 1hr, Masters, Univ. of Toronto
- Graduate course in Computer Sciences: Fanny Chevalier, *Topics in Interactive Computing: Information Visualization*, 16hrs, MSc and PhD, Univ. of Toronto
- Licence Informatique: Thomas Pietrzak (45 hrs), *Logique*, L3, Univ. Lille 1
- Licence Informatique: Thomas Pietrzak (36 hrs), *Automates et Langages*, L3, Univ. Lille 1
- Licence Sciences pour l'Ingénieur (SPI): Sylvain Malacria, *Introduction à l'Interaction Homme Machine*, 26hrs, L3, Institut Villebon Georges Charpak
- Research Masters in Computer Science & HCID Masters (EIT ICT Labs European Master in Human-Computer Interaction and Design): Stéphane Huot, *Advanced Programming of Interactive Systems*, 13.5 hrs, M1 & M2, Univ. Paris Saclay
- DUT Informatique: Géry Casiez, *IHM*, 72 hrs, 1<sup>st</sup> year, IUT A de Lille - Univ. Lille 1
- DUT Informatique: Géry Casiez, *Algorithmique*, 80 hrs, 1<sup>st</sup> year, IUT A de Lille - Univ. Lille 1
- DUT Informatique: Géry Casiez, *Modélisation mathématique*, 14 hrs, 2<sup>nd</sup> year, IUT A de Lille - Univ. Lille 1
- DUT Informatique: Géry Casiez, *Projets*, 18 hrs, 2<sup>nd</sup> year, IUT A de Lille - Univ. Lille 1

### 10.2.2. Supervision

PhD in progress: Hakim Si Mohammed, *Improving Interaction based on a Brain-Computer Interface*, started October 2016, advised by Anatole Lecuyer, Géry Casiez & Nicolas Roussel (in Rennes)

PhD in progress: Nicole Ke Chen Pong, *Comprendre et améliorer le vocabulaire interactionnel des utilisateurs*, started October 2016, advised by Nicolas Roussel & Sylvain Malacria

PhD in progress: Thibault Raffailac, *Languages and system infrastructure for interaction*, started October 2015, advised by Stéphane Huot & Stéphane Ducasse

PhD in progress: Amira Chalbi-Neffati, *Comprendre et mieux concevoir les animations dans le contexte des interfaces graphiques*, started October 2014, advised by Nicolas Roussel & Fanny Chevalier

PhD in progress: Jeronimo Barbosa, *Design and Evaluation of Digital Musical Instruments*, McGill University, started in 2013, advised by Marcelo Wanderley & Stéphane Huot (since 2016)

PhD in progress: Alexandre Kouyoumdjian, *Multimodal selection of numerous moving targets in large visualization platforms: application to interactive molecular simulation*, started October 2013, advised by Stéphane Huot, Patrick Bourdot & Nicolas Ferey (in Saclay)

PhD in progress: Justin Mathew, *New visualization and interaction techniques for 3D spatial audio*, started June 2013, advised by Stéphane Huot & Brian Katz (in Saclay)

PhD: Oleksandr Zinenko, *Interactive code restructuring*, Univ. Paris Saclay, defended in November 2016, advised by Stéphane Huot & Cédric Bastoul (Université de Strasbourg)

PhD: Alix Goguy, *Understanding and designing touch interaction using finger identification*, Univ. Lille 1, defended in October 2016 [11], advised by Géry Casiez.

PhD: Andéol Evain, *Optimizing the use of SSVEP-based brain-computer interfaces for human-computer interaction*, defended in December 2016, advised by Anatole Lecuyer, Géry Casiez & Nicolas Roussel (in Rennes)

### 10.2.3. Thesis committees

- Michael Glueck (PhD, University of Toronto): Fanny Chevalier
- Nicole Sultanum (PhD, University of Toronto): Fanny Chevalier
- Ignacio Avellino (PhD, Université Paris Saclay): Nicolas Roussel

### 10.2.4. Juries

- Morten Esbensen (PhD, IT University of Copenhagen): Nicolas Roussel, reviewer
- Élisabeth Rousset (PhD, Université de Grenoble): Géry Casiez, reviewer
- Sébastien Pelurson (PhD, Université de Grenoble): Géry Casiez, reviewer
- Waseem Safi (PhD, Université Cean Normandie): Thomas Pietrzak, examiner

## 10.3. Popularization

- “*Vers une meilleure appréciation des algorithmes qui nous entourent*”, talk for **Rencontres Inria Industrie**, Plaine Image, Tourcoing, November: Fanny Chevalier
- Prospective talk on HCI as part of BeyondLab’s “*Aux portes du futur*” evening, November: Nicolas Roussel
- “*Chorégraphie des Transitions animées*”, talk for CRISAL journée Recherche Innovation Création, Lille, October: Amira Chalbi-Neffati
- “*Les objets deviennent intelligents, et nous ?*”, talk at Lycée Diderot (Carvin) as part of Inria Lille’s “**Chercheurs Itinérants**” program, October: Nicolas Roussel
- “*Efficacité et performance des transitions animées*”, talk at EuraTechnologies (plateau Inria), March: Fanny Chevalier
- Presentation of the Mjolnir team, talk at EuraTechnologies (plateau Inria), January: Nicolas Roussel

## **POTIOC Project-Team**

# **10. Dissemination**

## **10.1. Promoting Scientific Activities**

### ***10.1.1. Scientific Events Organisation***

#### *10.1.1.1. General Chair, Scientific Chair*

“2nd International OpenViBE workshop”, International BCI meeting 2016, Asilomar, CA, USA, 2016 (Fabien Lotte)

#### *10.1.1.2. Member of the Organizing Committees*

”IHM et Education”, workshop at IHM conference, Fribourg, Switzerland, Nov. 2016 (Martin Hachet, Anke Brock)

“2nd International OpenViBE workshop”, International BCI meeting 2016, Asilomar, CA, USA, 2016 (Fabien Lotte, Camille Jeunet, Jérémy Frey)

“What’s wrong with us? Roadblocks and pitfalls in designing BCI applications”, International BCI meeting, Asilomar, CA, USA, 2016 (Fabien Lotte)

Special session “Human Factors and performance metrics for BMI Training and Operation”, IEEE SMC 2016, Budapest, Hungary, (Fabien Lotte, Camille Jeunet)

Diversity Co-Chair at the ACM CHI’16 conference, San José, USA, 05/2016 (Anke Brock)

Microsoft Student Research Competition at the ACM ASSETS’16 conference, Reno, USA, 10/2016 (Anke Brock)

### ***10.1.2. Scientific Events Selection***

#### *10.1.2.1. Member of the Conference Program Committees*

IEEE VR 2017 (Martin Hachet)

Eurographics STAR 2017 (Martin Hachet)

IHM 2016 (Martin Hachet)

Mobile and Ubiquitous Multimedia MUM 2016 (Anke Brock)

Mobile and Ubiquitous Multimedia MUM 2016 Poster Committee (David Furió, Anke Brock)

1st International Neuroadaptive Technology Conference 2017 (Fabien Lotte)

7th International Brain-Computer Interface Conference, 2017 (Fabien Lotte)

International Conference on Systems, Man and Cybernetics, Brain-Machine Interface Workshop (IEEE SMC) 2016 (Fabien Lotte, Camille Jeunet)

International workshop on Pattern Recognition in NeuroImaging (PRNI) 2016 (Fabien Lotte)

International Brain-Computer Interface Meeting 2016 (publicity committee+ review committee) (Fabien Lotte)

7th Augmented Human International Conference, 2016 (Fabien Lotte)

8th Augmented Human International Conference, 2017 (Fabien Lotte)

ACM ASSETS 2016 (Anke Brock)

Computer Applications and Quantitative Methods in Archaeology 2016 (CAA) (Pascal Guitton)

8th Augmented Human International Conference, 2017 (Fabien Lotte)

7th International Brain-Computer Interface Conference, 2017 (Camille Jeunet)

#### *10.1.2.2. Reviewer*

ACM SIGGRAPH 2016 (Martin Hachet)  
IEEE 3DUI 2017 (Martin Hachet)  
ACM ISS 2016 (Joan Sol Roo)  
ACM CHI 2016 (Fabien Lotte, Anke Brock, Camille Jeunet, Jérémy Frey)  
ACM CHI 2017 (Fabien Lotte, Camille Jeunet, Anke Brock, David Furió, Camille Jeunet, Jérémy Frey)  
Augmented Humans 2016 (Fabien Lotte)  
International BCI Meeting 2016 (Fabien Lotte)  
EICS 2016 (Fabien Lotte)  
IJCNN 2016 (Fabien Lotte)  
PRNI 2016 (Fabien Lotte)  
IEEE SMC 2016 (Fabien Lotte, Camille Jeunet)  
Eurohaptics 2016 (Anke Brock)  
Handicap 2016 (Anke Brock)  
HapticsSymposium 2016 (Anke Brock)  
ACM IHM 2016 (Anke Brock)  
ACM MobileHCI 2016 (Anke Brock)  
ACM NordiCHI 2016 (Anke Brock)  
ACM TEI 2016 (Anke Brock)  
ACM Ubicomp 2016 (Anke Brock)  
ACM UIST 2016 (Anke Brock)

### **10.1.3. Journal**

#### *10.1.3.1. Member of the Editorial Boards*

Associate Editor in Brain Computer Interfaces (Fabien Lotte)  
Associate Editor in Journal of Neural Engineering (Fabien Lotte)  
Review Editor for Frontiers in Robotics and AI (Martin Hachet)  
Review Editor for Frontiers in Neuroprosthetics (Fabien Lotte)  
Review Editor for Frontiers in Human-Media Interaction (Fabien Lotte)  
Guest Associate Editor, Frontiers in Robotics and AI, with D. Friedman, on “Brain-Computer Interfaces Technologies for Robotics and Virtual Reality”, 2016 (Fabien Lotte)  
TACCESS Special Issue for ASSETS’17 conference (Anke Brock)

#### *10.1.3.2. Reviewer - Reviewing Activities*

Computer and Graphics (Martin Hachet)  
Computers and Education (David Furió)  
Computational Intelligence and Neurosciences (Fabien Lotte)  
Journal of Neural Engineering (Fabien Lotte)  
Frontiers in Neurosciences / Frontiers in ICT (Fabien Lotte)  
IEEE Transactions on Biomedical Engineering (Fabien Lotte)  
IEEE Transactions on Neural Systems and Rehabilitation Engineering (Fabien Lotte)  
Le Travail Humain (Fabien Lotte)  
ACM TOCHI (Fabien Lotte)  
Nature Scientific Reports (Fabien Lotte)

ACM TACCESS (Anke Brock)  
 Journal of Psychophysiology (Camille Jeunet)  
 PLOS One (Camille Jeunet)  
 Progress in Brain Research (Camille Jeunet)  
 Transaction in Human Machine Systems (Camille Jeunet)  
 Brain Science (Camille Jeunet)

#### **10.1.4. Invited Talks**

"Tangible Interaction and Spatial Augmented Reality for Education", University of Sussex, Jan. 2016 (Martin Hachet).

"Vers des interfaces cerveau-ordinateur populaires", Conférence What's Up In Your Mind, Paris, Jun 2016 (Jérémy Frey)

"Interaction Homme-Machine pour l'Education : au-delà de la souris et de l'écran", Colloque Robotique et Education, Bordeaux, Juin 2016 (Martin Hachet).

"Human Learning and Alternative Applications Towards Usable Electroencephalography-based Brain-Computer Interfaces", Max Planck Institute, Tuebingen, Germany, December 2016 (Fabien Lotte)

"The birth and scope of the BrainConquest ERC starting grant project", European Research Day 2016, Tokyo, Japan, November 2016 (Fabien Lotte)

"Towards Usable EEG-based Brain-Computer Interfaces", Tokyo University of Agriculture and Technology, Tokyo, Japan, November 2016 (Fabien Lotte)

"Principles and promises of EEG-based Brain-Computer Interface technologies", 1st Iranian IBRO/APRC School of Cognitive Neuroscience, Tehran, Iran, September 2016 (Fabien Lotte)

"When Brain-Computer Interaction meets Educational Sciences", LaBRI general assembly, Bordeaux, France, July 2016 (Fabien Lotte)

"Toward Usable Mental Imagery-based Brain-Computer Interfaces", Brain and Spine Institute, Paris, France, July 2016 (Fabien Lotte)

« From Neurofeedback to Brain-Computer Interfaces », Neurofeedback workshop in Bordeaux, France, July 2016 (Fabien Lotte)

"Brain-Computer Interaction and Spatial Augmented Reality Research in Potioc team", Concordia University, Montreal, Canada, June 2016 (Fabien Lotte, Camille Jeunet)

"Latest research results in Brain-Computer Interfaces and Augmented Reality", Brain and Computers Digital Media Conference, Center for Digital Media, Vancouver, Canada, June 2016 (Fabien Lotte)

« Educational Science Principles for Brain-Computer Interface Design », Inserm Lyon, France, April 2016 (Fabien Lotte)

"Considering User Training and Alternative Applications to Design Usable EEG-based BCI Technologies", EPFL, Center for Neuroprosthetics, Geneva, Switzerland, March 2016 (Fabien Lotte)

"Traitement des signaux cérébraux et classification des états mentaux", Journée scientifique de l'IFRATH "Interfaces Cerveau-Ordinateur", Paris, France, February 2016 (Fabien Lotte)

"Reciprocal learning between machines and humans for neurofeedback and BCI", Première Journée Nationale sur le Neurofeedback, Paris, France, January 2016 (Fabien Lotte)

"Interacting with spatial information", Stanford HCI Group, Stanford University, USA, May 2016 (Anke Brock)

"Interacting with spatial information", HERE, Berkeley, USA, May 2016 (Anke Brock)

“Interaction avec des cartes géographiques pour tous”, Immersion, Bordeaux, France, April 2016 (Anke Brock, Julia Chatain)

“Interacting with spatial information”, University of Sussex, UK, February 2016 (Anke Brock)

Animation table ronde, Journée URFIST « Vers de nouveaux paradigmes pour l’édition scientifique », Bordeaux, March 2016 (Pascal Guitton)

"L'éthique en Sciences du numérique", Ecole du Management Inria, Paris, September 2016 (Pascal Guitton)

"Physiological computing and spatial augmented reality: reflecting on inner state", Paris Open Source Summit, Paris, November 2016 (Jérémy Frey)

"Transparence algorithmique et éthique", Journée nouveaux arrivants Inria, Saclay, December 2016 (Pascal Guitton)

"Interfaces cerveau-ordinateur : quoi, pourquoi et comment ?", ENSCBP - Media Sciences, Bordeaux, Février 2016 (Camille Jeunet)

"How Cognitive Sciences Can Contribute to Research in Brain-Computer Interaction", National Cognitive Science Conference 2016, San Diego (Camille Jeunet)

"Understanding and Improving Mental-Imagery based Brain-Computer Interface User Training: Towards Efficient, Reliable and Accessible BCIs", University of Oldenburg, October 2016 (Camille Jeunet)

"Understanding and Improving MI-BCI User-Training", University of Freiburg, Germany, November 2016 (Camille Jeunet)

### **10.1.5. Leadership within the Scientific Community**

IEEE 3DUI Steering committee - Leader (Martin Hachet)

### **10.1.6. Scientific Expertise**

Member of Jury for recruitment of Researcher (CR2-CR1) Inria Bordeaux (Martin Hachet)

Expert for the Millennium Science Initiative research group evaluation, Chile (Fabien Lotte)

Expert for the « Sapienza », University of Rome, research projects, Italy (Fabien Lotte)

Expert for the Partenariats Hubert-Curien (PHC) Germaine deStaël, France-Switzerland research projects (Fabien Lotte)

Etude "Panorama du cyberspace dans 3 à 5 ans" - Workshop "Evolutions technologiques", CEIS, CREC (Fabien Lotte)

Member of Inria Cellule de veille et de prospective (Pascal Guitton)

Expert for Credit Impot Recherche (Martin Hachet)

Member of the scientific committee of SCRIME (Martin Hachet)

### **10.1.7. Research Administration**

Member of Inria Bordeaux Sustainable Development Committee (Martin Hachet)

Member of Inria Ethical Committee (COERLE) (Pascal Guitton)

Member of Inria International Chairs Committee (Pascal Guitton)

Responsable of Inria RA2020 Committee (new annual Activity Report) (Pascal Guitton)

Member of Comité de Pilotage de Software Heritage (Pascal Guitton)

Member of Comité de Pilotage Responsabilité Sociétale de l’Université, Université de Bordeaux (Pascal Guitton)

Member of Conseil d’administration Institut d’Optique Graduate School (Pascal Guitton)

Member of Commission de recrutement des Inspecteurs Généraux de l’Education Nationale (IGEN) (Pascal Guitton)

Member of Inria Bordeaux Committee for Technological Development (Fabien Lotte)

Member of Inria Bordeaux Young Researchers Committee (Anke Brock)

## **10.2. Teaching - Supervision - Juries**

### **10.2.1. Teaching**

Licence : Jérémy Frey, Unix and Programming, CM-TD, 74.67h eqtd, L1 Computer Science, University of Bordeaux, France

Licence : Damien Clergeaud, Algorithmes et Programmation, TD et TP, 32h eqtd, L1 Computer Science, University of Bordeaux, France

Licence : Damien Clergeaud, Algorithmique des structures de données, TD et TP, 32h eqtd, L2 Computer Science, University of Bordeaux, France

Licence : Camille Jeunet, Sciences humaines et méthodes, CM-TD, 18h eqtd, Licence MIASHS, University of Bordeaux, France

Master : Jérémy Frey, Programming projects, TD, 18h eqtd, M1 Computer Science, University of Bordeaux, France

Master : Pascal Guitton, Virtual and Augmented Realities, CM, 36h eqtd, M2 Computer Science, University of Bordeaux, France

Master : Pascal Guitton, Digital accessibility, CM, 12h eqtd, M1 Cognitive Science, University of Bordeaux, France

Master : Jérémy Frey, Programming projects, TD, 10h eqtd, M2 Computer Science, University of Bordeaux, France

Master : Pascal Guitton, Assistive technologies, CM, 30h eqtd, M2 Cognitive Science, University of Bordeaux, France

Master : Anke Brock, Virtual Reality and 3D Interaction, CM-TD, 7,5h eqtd, M2 Cognitive Science, University of Bordeaux, France

Master : Martin Hachet, Virtual Reality and 3D Interaction, CM, 12h eqtd, M2 Cognitive Science, University of Bordeaux, France

Master : Fabien Lotte, Virtual Reality and 3D Interaction, CM, 4h eqtd, M2 Cognitive Science, University of Bordeaux, France

Master : Anke Brock, Interaction and Ergonomics, CM-TD, 10h eqtd, 3rd year (M2), Enseirb, Bordeaux, France

Master : Martin Hachet, Interaction and Ergonomics, CM-TD, 8h eqtd, 3rd year (M2), Enseirb, Bordeaux, France

Master: Fabien Lotte, Virtual Reality, Accessibility and Brain-Computer Interfaces, 4h eqtd, 3rd year (M2), ENSSAT, Lannion, France

Master: Fabien Lotte, Brain Computer Interfaces, 6h eqtd, 3rd year (M2), ESIEA, Laval, France

Master : Anke Brock, Human-Computer Interaction, CM-TD, 12h eqtd, M2 SRI, Upsitech Toulouse, France

Master: Fabien Lotte, Human-Computer Interactions, CM-TD, 7.5 eqtd, M1 Cognitive Sciences and Ergonomy, University of Bordeaux, France

Master : Anke Brock, Accessibility of interactive systems, CM-TD, 6h eqtd, M2 IHM, ENAC and University Toulouse, France

Master : Anke Brock, Accessibility of interactive systems, CM-TD, 6h eqtd, M2 Systèmes Mobiles Autonomes Communicants / Internet des Objets (Mobiles), University Bordeaux, France

Master : Camille Jeunet, HCI and Human factors, CM-TD, 18h eqtd, M1 Sciences Cognitives and Ergonomie, University of Bordeaux, France

MOOC : Pascal Guitton and H el ene Sauz eon, "Comment favoriser l'accessibilit e num erique", 5 weeks, Plate-forme France Universit  Num erique (FUN), large audience, initial and continuous training, about 4000 registered people.

### 10.2.2. Supervision

PhD: Camille Jeunet, "Improving User training approaches for Brain-Computer Interface", University of Bordeaux, Defense on December 2nd, 2016 (Martin Hachet, Fabien Lotte, co-supervision with Bernard N'Kaoua, and Sriram Subramanian)

PhD in progress: Julia Chatain, "Design and evaluation of augmented geographic maps", University of Bordeaux, since September 2015 (Anke Brock and Martin Hachet)

PhD in progress: Damien Clergeaud, "Collaborative interaction for aerospace scenarios", University of Bordeaux, since November 2014 (Pascal Guitton)

PhD in progress: Joan Sol Roo, "Interaction with Spatial Augmented Reality", University of Bordeaux, since December 2014 (Martin Hachet)

PhD in progress: Jelena Mladenovic, "User Modeling for Adaptive BCI training and operation", University of Bordeaux, since December 2015 (Fabien Lotte, co-supervised with J r mie Mattout)

PhD in progress: Pierre-Antoine Cinquin, "Design and Experimental Validation of Accessible E-learning systems for people with cognitive disabilities", University of Bordeaux, since September 2016 (H el ene Sauz eon, Pascal Guitton)

PhD in progress: L a Pilette, "Redefining Formative Feedback in Brain-Computer Interface User Training", University of Bordeaux, since September 2016 (Fabien Lotte, Bernard N'Kaoua)

PhD in progress: Lorraine Perronnet, "Neurofeedback and Brain Rehabilitation based on EEG and fMRI", Rennes University, since January 2014 (Fabien Lotte, co-supervision with Anatole L cuyer, Christian Barillot, Inria Rennes and Maureen Clerc, Inria Sophia Antipolis)

PhD in progress: Stephanie Lees, "Assessing and Optimising Human-Machine Symbiosis through Neural signals for Big Data Analytics", Ulster University, since February 2014 (Fabien Lotte, co-supervision with Damien Coyle, Paul McCullagh and Liam Maguire, Ulster University)

### 10.2.3. Juries

PhD (Rapporteur): Elizabeth Rousset, INP Grenoble, February 2016 (Pascal Guitton)

PhD (Rapporteur): Sareh Saeedi, Ecole Polytechnique F d rale de Lausanne (EPFL), Switzerland, March 2016 (Fabien Lotte)

PhD (Rapporteur): Hind Gacem, Telecom ParisTech, April 2016 (Martin Hachet)

PhD (Rapporteur): Honyun Cho, Gwangju Institute of Science and Technology, South Korea, June 2016 (Fabien Lotte)

PhD (Rapporteur): Sebastien Pelurson, Universit  Grenoble Alpes, August 2016 (Martin Hachet)

PhD (Pr sident): Brett Ridel, Universit  de Bordeaux, October 2016 (Pascal Guitton)

PhD (Pr sident): Carlos Zubiaga, Universit  de Bordeaux, November 2016 (Pascal Guitton)

PhD (Examineur): Emeric Baldisser, Universit  de Bordeaux, March 2016 (Pascal Guitton)

PhD (Examineur): Guillaume Claude, INSA Rennes, July 2016 (Pascal Guitton)

PhD (Examineur): Benoit Bossavit, Universidad de Navarra, Nov. 2016 (Martin Hachet)

PhD (Examineur): Liming Yang, Ecole Centrale de Nantes, December 2016 (Pascal Guitton)

Thesis Advisory Committee: Lonni Besan on, Universit  Paris Saclay, June 2016 (Martin Hachet)

Thesis Advisory Committee: Sarah Buchanan, University Central Florida, July 2016 (Martin Hachet)

## 10.3. Popularization





Figure 19. Teegi was demonstrated during several public events over the year, including “Fête de la Science” in La Cité des Sciences in Paris.

### 10.3.1. Science Festivals

Science Agora, Miraikan, Tokyo, Japan, November 2016 (Fabien Lotte)

Cartopartie, Fête de la Science, Bordeaux, October 2016 (Anke Brock)

Démonstration de Teegi, Cité des Sciences, Paris, retransmission en direct sur l’Esprit Sorcier, October 2016 (Jérémy Frey, Jelena Mladenovic, Thibault Lainé)

"Contrôler par la pensée: Apprenez comment fonctionne une interface cerveau-ordinateur en jouant à Tux Race et découvrez Teegi", Cap science, October 2016 ( Jelena Mladenovic, Jérémy Frey, Thibault Lainé)

### 10.3.2. Popularization Talks

“Les Interfaces Cerveau-Ordinateur”, CogTalk, Bordeaux, October 2016 (Fabien Lotte)

TEDx UTC (Compiègne, France, 01/2016): ”Toucher et entendre les cartes géographiques” [https://www.youtube.com/watch?v=sr2l8PQg\\_2E&feature=youtu.be](https://www.youtube.com/watch?v=sr2l8PQg_2E&feature=youtu.be), (Anke Brock)

"Comment le numérique nous aide à changer", Séminaire Science et développement durable, Bordeaux, June 2016 (Pascal Guitton)

"Réalité virtuelle et réalité augmentée : quelles réalités et quels futurs ?", Séminaire Photonique et réalité virtuelle, Bordeaux, November 2016 (Pascal Guitton)

"Le numérique et ses sciences dans le réel", Séminaire national « Enseigner l’option Informatique et création numérique au cycle terminal », ISENER (Futuroscope), November 2016 (Pascal Guitton)

Pint of Science, "Interfaces cerveau-ordinateur : Entre mythes et réalité", Bordeaux, May 2016 (Camille Jeunet)

### 10.3.3. Popularization Articles

"Mythes et réalités sur l’interaction cerveau-ordinateur", Livre "5 jeunes chercheurs d’avenir" (Prix de Thèse le Monde), Editions Le Pommier (Fabien Lotte)

### 10.3.4. Demonstrations

Inner Garden, Bordeaux Geek Festival (BGF), May 2016 (Joan Sol Roo, Julia Chatain).

Augmented Michelson Interferometer, Bordeaux Geek Festival (BGF), May 2016 (Benoit Coulais, David Furio)

Augmented Michelson Interferometer, Hall of ALPC region, June 2016 (David Furio)

Demonstration of Teegi, Colloque Robotique et Education, Bordeaux, Juin 2016 (Jérémy Frey, Thibault Lainé).

Demonstration of Teegi,, Bordeaux Geek Festival (BGF), May 2016 (Thibault Lainé)

### **10.3.5. Women In Science**

Femmes et Sciences Deputy Board Member (« suppléante au conseil d'administration »), since 2016 (Anke Brock)

Intervention in a high school in Valence d' Agen to present our research projects and career paths , March 2016 (Anke Brock with fellow members of Femmes et Sciences Aquitaine).

"Digit'elles -témoignages de femmes scientifiques" , Fête de la Science, Bordeaux, October 2016 (Anke Brock with fellow members of Femmes et Sciences Aquitaine)

Django girls, Django workshops for young participants, April and June 2016 (Julia Chatain)

Filles et Maths, Speed meeting with female highschool students ti speak about careers in mathematics, May 2016 (Julia Chatain)

Member of Inria Comité Parité et Egalité (Pascal Guitton)

### **10.3.6. Other**

Conference on Brain-Computer Interfaces and how to become a research scientist, in a High School in Tullés, December 2016 (Fabien Lotte)

Radio interview on BCI for "L'oeuf ou la poule", on CHOQ, a Montréal Radio from UQAM (Université du Québec à Montréal), Montreal, Canada, June 2016 (Fabien Lotte, Camille Jeunet)

Radio interview on BCI and VR on Radio Canada, in Vancouver, Canada, June 2016 (Fabien Lotte)

Radio interview about BCI and the Brain and Computers Digital Media Conference on the Vancouver-based Round House Radio, June 2016 (Fabien Lotte)

Nuit des Chercheurs, Cap Sciences, Bordeaux, Septembre 2016 (Camille Jeunet)

## TITANE Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. General Chair, Scientific Chair

Florent Lafarge was co-chair of the ISPRS working group on point cloud processing.

#### 10.1.1.2. Member of the Organizing Committees

Pierre Alliez is a member of the Steering Board of the EUROGRAPHICS Workshop on Graphics and Cultural Heritage.

Yuliya Tarabalka chaired a session “Classification of Hyperspectral Image” at IEEE IGARSS 2016.

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Member of the Conference Program Committees

Pierre Alliez was a program committee member of ACM SIGGRAPH, EUROGRAPHICS annual conference, EUROGRAPHICS Symposium on Geometry Processing, Geometric Modeling and Processing, Shape Modeling International and EUROGRAPHICS Workshop on Graphics and Cultural Heritage.

Florent Lafarge was a program committee member for the ISPRS congress in 2016.

Yuliya Tarabalka was a program committee member for ACIVS 2016, Lecce, Italy.

#### 10.1.2.2. Reviewer

Pierre Alliez was a reviewer for the conferences listed above, and for around 25 additional papers in several journals ranging from geometric modeling to computer vision. Florent Lafarge was a reviewer for JPRS.

Yuliya Tarabalka was a reviewer for the conferences IEEE IGARSS (student competition selection committee) and ACIVS 2016.

### 10.1.3. Journal

#### 10.1.3.1. Member of the Editorial Boards

Pierre Alliez is an associate editor of ACM Transactions on Graphics, Elsevier Graphical Models, Computer Aided Geometric Design and Visual Informatics (since 2016). He is also a member of the editorial board of the CGAL open source project.

Florent Lafarge is an associate editor of The Visual Computer since 2015.

Yuliya Tarabalka was a co-editor of the special issue “Hyperspectral Imaging and Image Processing” of the Springer journal Sensing and Imaging.

#### 10.1.3.2. Reviewer - Reviewing Activities

Florent Lafarge was a reviewer for CVPR, ECCV, and SIGGRAPH.

Yuliya Tarabalka was a reviewer for the journals IEEE TGRS and IEEE JSTARS.

### 10.1.4. Invited Talks

Pierre Alliez gave an invited talk at the CVPR Workshop on Large Scale 3D Data: Acquisition, Modelling and Analysis. The talk was entitled: *Shape Reconstruction and Approximation: Robustness and Guarantees*. See [http://www.multimediauts.org/3DWorkshop\\_CVPR2016/Program.html](http://www.multimediauts.org/3DWorkshop_CVPR2016/Program.html).

He also gave a keynote at STAG 2016: Smart Tools and Apps in computer Graphics, organized October 3-4, in Genova, Italy. The talk was entitled: *Low Distortion Inter-surface Mapping via Optimal Mass Transport*. He also gave a course at ACM SIGGRAPH on the CGAL library, in collaboration with Andreas Fabri from GeometryFactory.

### 10.1.5. Scientific Expertise

Pierre Alliez was an evaluator and reviewer for the H2020, EuroSTARS and ERC programmes from the European commission. He participated to the Scientific Commissions of Belgium FNRS (Fund for Scientific Research). He was a member of the panel GEV 01 (mathematics and computer science) of ANVUR (Italian research evaluation agency). We evaluated the period 2011-2014 through bibliometry and peer-review. He was also a reviewer for PRIN projects (fundamental research projects) for the MIUR (the Italian Ministry for Education, University and Research).

Yuliya Tarabalka was an expert evaluator for an ANR project submission in May 2016. She is since November 2016 a member of the expert panel SBWT (signal processing) of the FWO (Belgian research funding foundation).

### 10.1.6. Research Administration

Pierre Alliez: member of the BCP (bureau du CP) since 2015, comité MASTIC (popularization), and comité espace immersif.

Florent Lafarge was an elected member of the Comité de Centre from 2013 to 2016, and a member of the CSD (Commission de Suivi Doctorale) from 2011 to 2016.

Yuliya Tarabalka is an elected member of the Comité de Centre since 2016.

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

Master: Pierre Alliez and Florent Lafarge, Ingénierie 3D, 21h, M2, university Nice Sophia Antipolis, France.

Master: Pierre Alliez and Florent Lafarge, 3D Meshes and Applications, 32h, M2, Ecole des Ponts ParisTech, France.

Master: Pierre Alliez, Mathématiques pour la géométrie, 24h, M2, EFREI, France.

Master: Florent Lafarge, Traitement d'images numériques, 9h, M2, university Nice Sophia Antipolis, France.

Master: Yuliya Tarabalka, Mathematical methods, 25h, MSc in data sciences and business analytics ESSEC-CS, CentraleSupélec, France.

L2: Yuliya Tarabalka, Advanced algorithms, 28.5h, L2 Networks and Telecoms, IUT Nice Cote d'Azur, Sophia-Antipolis, France.

### 10.2.2. Supervision

PhD defended November 29th: Manish Mandad, Shape approximation with guarantees, since October 2012, Pierre Alliez.

PhD in progress: Dorothy Duan, Semantized Elevation Maps, since October 2013, Florent Lafarge.

PhD in progress: Jean-Dominique Favreau, Sketch-based modeling in multi-view context, since October 2014, Florent Lafarge and Adrien Bousseau.

PhD in progress: Hao Fang, Scale-space understanding in urban scenes, since March 2016, Florent Lafarge.

PhD in progress: Jean-Philippe Bauchet, City modelling from high resolution satellite images, since October 2016, Florent Lafarge.

PhD in progress: Emmanuel Maggiori, Representation and Analysis of Multisensor Remote Sensing Images with Partition Trees, University of Nice-Sophia Antipolis, since January 2015, Yuliya Tarabalka and Pierre Alliez.

### **10.2.3. Juries**

Pierre Alliez:

- Thesis reviewer: Ludovic Blache (CReSTIC-SIC Reims).
- Thesis reviewer: Ruqi Huang (Inria Saclay).
- Thesis examiner: Mael Rouxel-Labbé (Inria Sophia Antipolis)

Florent Lafarge:

- Thesis examiner: Remi Cura (University Paris Est).

Yuliya Tarabalka:

- Monitoring committee for the thesis of Amine Bohi, Southern University of Toulon-Var in October 2016.

## **10.3. Popularization**

Pierre Alliez participated to the "Fête de la science" in Juan-les-Pins, October 22 and 23. He also gave two talks in high schools: April 28 in Celony, and February 25th in Aix Valabre, and organized a workshop for MathC2+ in June.

## **ALPAGE Project-Team**

# **9. Dissemination**

## **9.1. Promoting Scientific Activities**

### **9.1.1. Scientific Events Selection**

#### *9.1.1.1. Member of the Conference Program Committees or Reviewer*

- Marie Candito was a reviewer or member of the program committee for the following events: NAACL 2016, CONLL 2016, RECITAL 2016, COLING 2016
- Benoît Crabbé was a reviewer or member of the program committee for the following events: NAACL 2016, ACL 2016, COLING 2016, EMNLP 2016, CONLL 2016.
- Maximin Coavoux was a sub-reviewer or member of the program committee for the following events: ACL 2016, EMNLP 2016.
- Héctor Martínez Alonso was a reviewer or member of the program committee for the following events: ACL 2016, COLING 2016, CONLL 2016, EMNLP 2016, EACL 2017, NAACL 2016 , MWE 2016 and WNUT 2016.
- Laurent Romary was a member of the program committee for the following events: CMLC-4, Digital Humanities and Iconography, The case of alpine mural painting, Datech 2016, CILA 2016, TOTh (Terminology & Ontology: Theories and applications), LDL-2016, LG-LP 2016, ISA-12
- Benoît Sagot was a member of the program committee for the following events: NAACL 2016, EACL 2017, EMNLP 2016, ACL 2016
- Djamé Seddah was a reviewer or member of the program committee for the following events: ACL 2016, COLING 2016, EMNLP 2016, CONLL 2016, TLT 2016, LAW 2016, TALN 2016 and others workshops.
- Éric Villemonte de La Clergerie was a reviewer or member of the program committee for the following events: COLING'16 (tracks Parsing, and "Resources, Software and Tools"), LREC'16, NAACL'16, DiscoNLP'16, Toth'16

### **9.1.2. Journal**

#### *9.1.2.1. Member of the Editorial Boards*

- Laurent Romary is co-editor of the overlay Journal of Data Mining and Digital Humanities and for the DH Commons journal
- Laurent Romary is member of the advisory board of the Journal of the Text Encoding Initiative (jTEI)

#### *9.1.2.2. Reviewer - Reviewing Activities*

- Héctor Martínez Alonso was a reviewer for the Artificial Intelligence journal
- Laurent Romary was a reviewer for the jTEI journal
- Benoît Sagot was a reviewer for the following journals: Journal of Language Modelling, Language Resources and Evaluation, Northern European Journal of Language
- Djamé Seddah was a reviewer for the following journals: Asian Languages and Information Processing, Language Resources and Evaluation

### **9.1.3. Invited Talks**

- Marie Candito gave a talk on 24/03/2016 at the "3ème journée TAL et IA ", Paris
- Marie Candito gave a talk on 27/10/2016 at the DIGICOSME Labex, LIMSI, Orsay

- Héctor Martínez Alonso gave an invited talk on 05/04/2016 at PARSEME/ENeL workshop on MWE e-lexicons, Skopje (Republic of Macedonia)
- Héctor Martínez Alonso gave an invited talk on 01/06/2016 at Darmstadt Technical University (Germany).
- Marie Puren gave an invited talk on 26/10/2016 for theDARIAH's Humanities At Scale Winter School at Charles University in Prague.
- Marie Puren gave an invited talk on 22/11/2016 during the colloquim "DHNord" at the "Maison Européenne des Sciences de l'Homme et de la Société" in Lille.
- Charles Riondet gave an invited talk on 26/10/2016 at the DARIAH's Humanities at Scale Winter School, Charles University, in Prag (Czech Republic)
- Laurent Romary gave a speech at Ready to Reach Out, Conference on Digitization of Cultural Heritage (NL EU presidency) "Data and Dissertations", Amsterdam, The Netherlands on 29/06/2016
- Laurent Romary gave a keynote at ETD 2016 "Data and Dissertations", Lille, France on 11/07/2016 [50]
- Laurent Romary gave a keynote at Language Technologies and & Digital Humanities 2016 on 30/09/2016 in Ljubljana, Slovenia [51]
- Benoît Sagot was an invited panelist during the AnaMorphoSys conference on 20-22/06/2016 in Lyon
- Benoît Sagot gave an invited talk at the EPHE workshop on Digital Humanities on 12/10/2016 in Paris
- Djamé Seddah gave a keynote talk at the workshop "Data Driven Approach to Networks and Language" (Lyon)
- Djamé Seddah gave a keynote talk at the workshop "Challenges for Data-driven Natural Language Analysis beyond Standard Data (Lyon)
- Djamé Seddah gave a invited talk in Dusseldorf (Formal Linguistic Departement) on deep syntax based graph-parsing
- Djamé Seddah gave a invited talk in Lyon (ENS seminar series) on morpho-syntactic analysis in challenging environments
- Djamé Seddah gave a invited talk at the 1st NLP Paris Meetup on graph parsing for French
- Éric Villemonte de La Clergerie gave an invited talk at the meeting on "Information, Me´dias et Informatique" (IRISA Rennes, 15/03/2016)
- Éric Villemonte de La Clergerie gave an invited tutorial at the COST Parseme meeting (Dubrovnik, 27/09/2016)
- Éric Villemonte de La Clergerie gave an invited talk at the AIM-WEST & PARSEME-FR Workshop (IMAG Grenoble, 4/10/2016)
- Éric Villemonte de La Clergerie gave an invited talk at the NLP meetup (Paris, 23/11/2016)

#### **9.1.4. Leadership within the Scientific Community**

##### *9.1.4.1. Involvement in international initiatives*

- Alpage is involved in the ISO subcommittee TC 37/SC 4 on "Language Resource Management". Éric Villemonte de La Clergerie has participated in various ISO meetings as an expert, in particular on morpho-syntactic annotations (MAF), feature structures (FSR & new FSD), and syntactic annotations (SynAF) [55]. Within the same subcommittee, Laurent Romary is the convener of the working group on lexical resources (WG4).
- Laurent Romary is chairman of ISO committee TC 37 "Terminology and other language and content resources"

- Laurent Romary chairs the Board of Directors of the European Research Infrastructure Consortium DARIAH established by the European Commission to coordinate Digital Humanities infrastructure activities in Europe.
- Laurent Romary is member of the TEI Archiving, Publishing, and Access Service (TAPAS) project advisory board
- Laurent Romary is member of the International Advisory board of the Belgrade Center for Digital Humanities

#### 9.1.4.2. *Involvement in national initiatives*

- Alpage has many responsibilities within the LabEx EFL. Until February 2015, Benoît Sagot is deputy head of this research strand; Marie Candito is deputy head of the research strand on computational semantics; Benoît Crabbé is deputy head of the research strand on experimental grammar; all three are therefore deputy members of the Scientific and Governing Boards of the LabEx; Laurence Danlos is a member of the Scientific Board of the LabEx EFL, representing Alpage;
- Laurent Romary is the leader of the scientific committee of the EquipEx Ortolang, of which Benoît Sagot is also a member.
- Laurent Romary is chairman of the scientific council of ABES (Agence Bibliographique de l'Enseignement Supérieur)
- Laurent Romary is also member of several scientific committee or advisory board: Labex 'Les passes dans le présent' (PasP), OpenAIRE 2020, OpenEdition (UMS Cleo)
- Laurent Romary is the Inria scientific advisor for Scientific and Technical Information, in charge in particular of the Open Access strategy.

#### 9.1.4.3. *Other activities for the scientific community*

- Laurence Danlos is member of the Permanent Committee of the TALN conference (CPerm) organised by ATALA.

#### 9.1.5. *Scientific Expertise*

- Marie Candito was member of the committee for the "prix de thèse ATALA"
- Benoît Crabbé was reviewer for a ERC starting grant
- Laurent Romary was project reviewer for Fonds National Suisse, Switzerland
- Laurent Romary was project reviewer for the Canada Foundation for Innovation, Canada
- Laurent Romary was project reviewer for LabEx PATRIMA, Switzerland
- Laurent Romary has advised the European Patent Office for the specification of their model for representing the non patent literature, based on the TEI (Text Encoding Initiative) guidelines.
- Laurent Romary has been a referee for the selection of a professor at the University of Cologne, Germany
- Laurent Romary has part of the selection committee for a professorship at the Université de Lorraine, France
- Benoît Sagot was project reviewer for the ANR
- Benoît Sagot was an elected board member of the French NLP society (ATALA) until July 2016
- Benoît Sagot was a member of the HCERES evaluation committee for the UMR ATILF (december 2016)
- Djamel Seddah was a reviewer for the Luxembourg research funding agency.
- Djamel Seddah was an external reviewer for a Machine Learning PhD thesis (University of Barcelona, sup: Xavier Carreras)



- Éric Villemonte de La Clergerie has participated to several AFNOR meetings in relation with ISO TC37SC4 “Language Resource Management”. He was also a member of the French delegation at the annual ISO TC37 meeting (Copenhagen, June 2016)
- Éric Villemonte de La Clergerie was one of the animators of the working group of the GFII on Knowledge Technologies, and was also involved in the discussions of the GFII about the "regulation of algorithms"

### **9.1.6. Research Administration**

#### *9.1.6.1. University duties*

- Lucie Barque was until June 2016 deputy director of the Linguistic department at Université Paris Nord
- Marie Candito is deputy director of the UFR of Linguistics.
- Maximin Coavoux is a student member of the Administrative board of the UFR of Linguistics of University Paris Diderot.
- Benoît Crabbé is a member of the Administrative board of the UFR of Linguistics of University Paris Diderot.
- Laurence Danlos is the chair of the Scientific Committee of the Linguistics UFR of University Paris Diderot.
- Laurence Danlos is the deputy chair of the Doctoral School for Linguistic Sciences (École Doctorale de Sciences du Langage).

## **9.2. Teaching - Supervision - Juries**

### **9.2.1. Teaching**

Licence: Lucie Barque, Phonétique, 22,5 heures en équivalent TD, niveau L2, Université Paris 13, France

Licence: Lucie Barque, Dictionnaires électroniques, 22,5 heures en équivalent TD, niveau L2, Université Paris 13, France

Licence: Lucie Barque, Corpus électroniques, 22,5 heures en équivalent TD, niveau L2, Université Paris 13, France

Licence: Lucie Barque, Syntaxe et sémantique, 22,5 heures en équivalent TD, niveau L3, Université Paris 13, France

Licence: Lucie Barque, Pragmatique et Énonciation, 11 heures en équivalent TD, niveau L3, Université Paris 13, France

Licence: Timothée Bernard, TD d'Algorithmique, 24 heures en équivalent TD, niveau L3, Université Paris 7 Diderot, France

Licence: Marie Candito, Linguistique de corpus, 28 heures en équivalent TD, niveau L3, Université Paris Diderot, France

Licence: Marie Candito, Probabilités et statistiques pour le TAL, 28 heures en équivalent TD, niveau L3, Université Paris Diderot, France

Licence: Maximin Coavoux, Programmation 2, 28 heures en équivalent TD, niveau L3, Université Paris Diderot, France

Licence: Benoît Crabbé, Introduction à la programmation, 24 heures en équivalent TD, niveau L3, Université Paris Diderot, France.

Licence: Laurence Danlos, Introduction au TAL, 32 heures en équivalent TD, niveau L3, Université Paris-Diderot, France

Master: Lucie Barque, Ressources lexicales pour le TAL, 24 heures en équivalent TD, niveau M2, Université Paris 13, France

Master: Lucie Barque, La langue et son enseignement, 18 heures en équivalent TD, niveau M1, Université Paris 13, France

Master: Lucie Barque, Problématiques de la néologie, 36 heures en équivalent TD, niveau M2, Université Paris 13, France

Master: Timothée Bernard, Phonétique (TD), 12 heures en équivalent TD, niveau M1, Université Paris Diderot, France

Master: Timothée Bernard, Langages formels (TD), 24 heures en équivalent TD, niveau M1, Université Paris Diderot, France

Master: Marie Candito, Analyse sémantique automatique du langage naturel, 14 heures en équivalent TD, niveau M2, Université Paris Diderot, France

Master: Marie Candito, Traduction automatique, 51 heures en équivalent TD, niveau M1, Université Paris Diderot, France

Master: Marie Candito, Apprentissage automatique pour le TAL, 60 heures en équivalent TD, niveau M1, Université Paris Diderot, France

Master: Maximin Coavoux, Approches probabilistes du TAL (TD), 24 heures en équivalent TD, niveau M1, Université Paris Diderot, France

Master: Benoît Crabbé, Linguistique empirique et expérimentale, 24 heures en équivalent TD, niveau M2, Université Paris Diderot, France.

Master: Laurence Danlos, Discours: Analyse et génération de textes, 32 heures en équivalent TD, niveau M2, Université Paris-Diderot, France

Master: Laurent Romary, Basic encoding and annotation of textual sources in TEI, 24 hours, Master of Library and Information Science, Fach Hochschule Potsdam, Germany

Continuous training: Laurent Romary, Codage de document scientifique en XML TEI, 16 hours, INIST-CNRS, France

### 9.2.2. Supervision

PhD in progress: Timothée Bernard, “Analyse discursive et factualité”, started in September 2015, supervised by Laurence Danlos (supervisor) and Philippe de Groote (co-supervisor)

PhD in progress: Raphael Salmon, “Implémentation d’un système de génération à base de contraintes”, Université Paris-Diderot, started in October 2013, supervised by Laurence Danlos (supervisor) and Alain Kaeser (tutor in the company Yseop)

PhD in progress: Marianne Djemaa, "Création semi-automatique d’un FrameNet du français", started in October 2012, supervised by Marie Candito

PhD: Corentin Ribeyre, “Vers la syntaxe profonde pour l’interface syntaxe-sémantique ”, started in November 2012, supervised by Laurence Danlos (supervisor), Djamé Seddah (co-supervisor) and Éric Villemonte de La Clergerie (co-supervisor), defended on January 27, 2016

PhD in progress: Maximin Coavoux, “Représentations continues pour l’analyse syntaxique et sémantique automatique”, started in September 2015, supervised by Benoît Crabbé.

PhD in progress: Loïc Grobol, “Reconnaissance automatique de chaînes de coréférences en français par combinaison d’apprentissage automatique et de connaissances linguistiques”, started in October 2016, supervised by Isabelle Tellier (supervisor), Marco Dinarelli (co-supervisor), and Éric Villemonte de La Clergerie (co-supervisor)

PhD in progress: Axel Herold, “Automatic identification and modeling of etymons in retro-digitized dictionaries”, started in November 2016, supervised by Laurent Romary

PhD in progress: Jack T. Bowers, “Technology, description and theory in language documentation: creating a comprehensive body of multi-media resources for Mixtepec-Mixtec using standards, ontology and Cognitive Linguistics”, started in November 2016, supervised by Laurent Romary

PhD in progress: Mohamed Khemakhem, “Structuration automatique de dictionnaires à partir de modèles lexicaux standardisés”, started in September 2016, supervised by Laurent Romary

### 9.2.3. Juries

Laurence Danlos was an examiner in the PhD defense committee of Aleksandre Maskharashvili. Title: Discourse Modeling with Abstract Categorical Grammars. University: Université de Lorraine. PhD supervisor: P. de Groot, Sylvain Pogodalla. Defense date: 1st December 2016.

Laurent Romary was a reviewer (*rapporteur*) in the PhD defense committee of Sirine Boukedi Troudi. Title: Outils d’analyse des structures non-têtes. University: Université de Sfax. PhD supervisor: Kais Haddar. Defense date: 11 May 2016.

Laurent Romary was a reviewer (*rapporteur*) in the PhD defense committee of Daouda Sawadogo. Title: Architectures logicielles et mécanismes pour la gestion adaptative et consolidée de ressources numériques dans une application interactive scénarisée. University: Université de La Rochelle. PhD supervisor: Pascal Estrailier and Ronan Champagnat. Defense date: 28 June 2016.

Djamé Seddah and Éric Villemonte de La Clergerie was a member in the PhD defense committee of Corentin Ribeyre as co-supervisor, together with Laurence Danlos (as PhD director). Title: Méthodes d’Analyse Supervisée pour l’Interface Syntaxe-Sémantique. University: Université Paris-Diderot. Defense date: 27 January 2016.

Éric Villemonte de La Clergerie was a member in the PhD defense committee of Julie Belião. Title: How prosody and syntax are mapping: A study of synchronization and congruence. University: Université Paris Ouest. Defense date: 5 December 2016

## 9.3. Popularization

- Interview of Laurent Romary on new scientific publication models for APS news, American Physical Society (<http://www.aps.org/publications/apsnews/201602/axiv.cfm>).
- Laurent Romary and Marie Puren have given an interview on 24/11/2016 on the European project Parthenos for the Inria website (<https://www.inria.fr/centre/paris/actualites/epi-alpage-historiens-et-informaticiens-reunis-dans-le-projet-europeen-parthenos>).
- Timothée Bernard has welcomed two high school students at Alpage during 4 days, in the framework of the “Science Académie” of the “Paris-Montagne” association.

## MULTISPEECH Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. General Chair, Scientific Chair

- General co-chair, 4th CHiME Speech Separation and Recognition Challenge (E. Vincent)
- General co-chair, 4th International Workshop on Speech Processing in Everyday Environments, San Francisco, USA, September 2016 (E. Vincent)
- General co-chair, 14th International Conference on Auditory-Visual Speech Processing, Stockholm, Sweden August 2017 (S. Ouni)
- Chair, SiSEC 2016, Signal Separation Evaluation Challenge (A. Liutkus)
- Elected chair, Steering Committee of the Latent Variable Analysis and Signal Separation (LVA/ICA) conference series (E. Vincent)
- Chair, Challenges Subcommittee, IEEE Technical Committee on Audio and Acoustic Signal Processing (E. Vincent)

#### 10.1.1.2. Member of the Organizing Committees

- Member of the organizing committee, 2017 IEEE Automatic Speech Recognition and Understanding Workshop, Okinawa, Japan, December 2017 (E. Vincent)
- Member of the steering committee, Detection and Classification of Acoustic Scenes and Events (DCASE) challenge series (E. Vincent)

#### 10.1.1.3. Member of the Conference Program Committees

- Area chair for Analysis of Speech and Audio Signal, INTERSPEECH'2016 (D. Juvet)
- Area chair for Audio and Speech Source Separation, IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) (E. Vincent)

#### 10.1.1.4. Reviewer

- CHiME 2016 - Speech Separation and Recognition Challenge (E. Vincent)
- EUSIPCO 2016 - European Signal Processing Conference (D. Juvet)
- ICECS 2016 - Conference on Environmental and Computer Science (R. Serizel)
- INTERSPEECH 2016 (A. Bonneau, S.Ouni, E. Vincent, I. Illina, Y. Laprie)
- IROS 2016 - International Conference on Intelligent Robots and Systems (E. Vincent)
- IVA 2016 - International Conference on Intelligent Virtual Agents (S. Ouni)
- JEP 2016 - Journées d'Etudes sur la Parole (D. Juvet, A. Bonneau, E. Vincent, D. Fohr, I. Illina, O. Mella, Y. Laprie)
- SLT 2016 - IEEE Spoken Language Technology Workshop (E. Vincent)

### 10.1.2. Journal

#### 10.1.2.1. Member of the Editorial Boards

- Computer Speech and Language, special issue on Multi-Microphone Speech Recognition in Everyday Environments (E. Vincent)
- Speech Communication (D. Juvet)
- Traitement du signal (E. Vincent)

International Journal of Learner Corpus Research, special issue on "Investigating segmental, prosodic and fluency features in spoken learner corpora" (A. Bonneau, Guest Editor)

Speech Communication, special issue on Realism in Robust Speech and Language Processing (E. Vincent)

#### *10.1.2.2. Reviewer - Reviewing Activities*

Computer Speech and Language (D. Jouvét, S. Ouni, E. Vincent)

Digital Signal Processing (E. Vincent)

IEEE Transactions on Audio, Speech and Language Processing (A. Liutkus, S. Ouni, R. Serizel)

IEEE Transactions on Signal Processing (A. Liutkus)

IEEE Signal Processing Letters (A. Liutkus, R. Serizel)

Journal of the Acoustical Society of America (Y. Laprie)

JASA Express Letters (Y. Laprie)

Speech Communication (E. Vincent, Y. Laprie)

#### *10.1.3. Invited Talks*

Séparation de sources: quand l'acoustique rencontre le machine learning, keynote talk, 13e Congrès Français d'Acoustique (E. Vincent) [22]

Speech recognition, Ecole Nationale d'Ingénieurs de Tunis, May 2016 (D. Jouvét)

Les corpus acoustiques et langagiers pour la reconnaissance de la parole, Seminar about Big Data, LIA-LINOS (Laboratoire International Associé), May 2016 (O. Mella)

Parole audiovisuelle : pour faciliter la communication parlée, Praxiling, Université de Montpellier 3, October 2016 (S. Ouni)

#### *10.1.4. Leadership within the Scientific Community*

Elected chair, ISCA Special Interest Group on Robust Speech Processing (E. Vincent)

Secretary/Treasurer, executive member of AVISA (Auditory-VISual Speech Association), an ISCA Special Interest Group (S. Ouni)

Member IEEE Technical Committee on Audio and Acoustic Signal Processing (A. Liutkus)

#### *10.1.5. Scientific Expertise*

Expertise of an ANR project proposal (D. Jouvét, Y. Laprie, E. Vincent)

Expertise of a project for the Research Foundation Flanders – FWO (S. Ouni)

#### *10.1.6. Research Administration*

Elected Member of the board of the AM2I Scientific Pole - Université de Lorraine (Y. Laprie)

Member of the HCERES visiting committee for LIUM (D. Jouvét)

Chairman of selection committee for the position of Assistant Professor (ESSTIN 0762, May 2016), Y. Laprie.

Member of a selection committee (Université d'Avignon, May 2016), E. Vincent

Member of a selection committee (Université du Maine, May 2016), D. Jouvét

Member of a selection committee (Télécom ParisTech, June 2016), E. Vincent

Member of the "Commission de développement technologique" (A. Bonneau)

## **10.2. Teaching - Supervision - Juries**

### *10.2.1. Teaching*

DUT: I. Illina, Programming in Java, 150 hours, L1, University of Lorraine, France

- DUT: I. Illina, Linux System, 65 hours, L1, University of Lorraine, France
- DUT: I. Illina, Supervision of student projects and stages, 50 hours, L2, University of Lorraine, France
- DUT: S. Ouni, Programming in Java, 24 hours, L1, University of Lorraine, France
- DUT: S. Ouni, Web Programming, 24 hours, L1, University of Lorraine, France
- DUT: S. Ouni, Graphical User Interface, 96 hours, L1, University of Lorraine, France
- DUT: S. Ouni, Advanced Algorithms, 24 hours, L2, University of Lorraine, France
- DUT: R. Serizel, Introduction to computer tools, 108h, L1, University of Lorraine – IUT Nancy Charlemagne, France
- Licence: V. Colotte, C2i - Certificat Informatique et Internet, 50h, L1, University of Lorraine, France
- Licence: V. Colotte, System, 115h, L3, University of Lorraine, France
- Licence: O. Mella, C2i - Certificat Informatique et Internet, 28h, L1, University of Lorraine, France
- Licence: O. Mella, Introduction to Web Programming, 30h, L1, University of Lorraine, France
- Licence: O. Mella, Computer Networking, 80h, L2-L3, University of Lorraine, France
- Licence: A. Piquard-Kipffer, Education Sciences, 36h, L1, France
- Licence: A. Piquard-Kipffer, Reading and Writing, 27h, L2, Département Orthophonie, University of Lorraine, France
- Licence: A. Piquard-Kipffer, Psycholinguistics, 6 hours, L2 Département Orthophonie, University Pierre et Marie Curie-Paris, France
- Licence: A. Piquard-Kipffer, Reading and Writing assessment, 10h, L3, Département Orthophonie, University of Lorraine, France
- Master: V. Colotte, Introduction to Speech Analysis and Recognition, 18h, M1, University of Lorraine, France
- Master: Y. Laprie, Analyse, perception et reconnaissance de la parole, 32 hours, M1, University of Lorraine, France
- Master: O. Mella, Computer Networking, 74h, M1, University of Lorraine, France
- Master: O. Mella, Introduction to Speech Analysis and Recognition, 12h, M1, University of Lorraine, France
- Master: S. Ouni, Multimedia in Distributed Information Systems, 31 hours, M2, University of Lorraine, France
- Master: A. Piquard-Kipffer, Dyslexia, 25 hours, M1, Département Orthophonie, University of Lorraine, France
- Master: A. Piquard-Kipffer, Reading and writing, 6 hours, M1, Département Orthophonie, University Pierre et Marie Curie-Paris, France
- Master: A. Piquard-Kipffer, Deaf People and Reading, 15 hours, M2 Département Orthophonie, University of Lorraine, France
- Master: A. Piquard-Kipffer, Psychology, 40 hours, M2, ESPE, University of Lorraine, France
- Master: A. Piquard-Kipffer, French Language Didactics, 80 hours, M2, ESPE, University of Lorraine, France
- Engineer school: V. Colotte, Conception and developpement in XML, 20h, Bac+3, Telecom Nancy, France
- Ecole d'audioprothèse : A. Bonneau, Phonetics, 16 h, University of Lorraine
- Doctorat: A. Piquard-Kipffer, Language Pathology - speech and language screening, 15 hours, EHESP, University of Sorbonne- Paris Cité, France

Adults: O. Mella, Computer science courses for secondary school teachers (Informatique et Sciences du Numérique courses) (21h), ESPE of Academy Nancy-Metz, University of Lorraine, France

Other: V. Colotte, Responsible for "Certificat Informatique et Internet" for the University of Lorraine, France (50000 students, 30 departments)

Other: S. Ouni, Responsible of Année Spéciale DUT, University of Lorraine, France

### 10.2.2. Supervision

PhD: Imran Sheikh, "Exploiting Semantic and Topic Context to Improve Recognition of Proper Names in Diachronic Audio Documents", November 2016, Irina Illina, Dominique Fohr and Georges Linares.

PhD in progress: Baldwin Dumortier, "Contrôle acoustique d'un parc éolien", September 2014, Emmanuel Vincent and Madalina Deaconu.

PhD in progress: Quan Nguyen, "Mapping of a sound environment by a mobile robot", November 2014, Francis Colas and Emmanuel Vincent.

PhD in progress: Aditya Nugraha, "Deep neural networks for source separation and noise-robust speech recognition", January 2015, Antoine Liutkus and Emmanuel Vincent.

PhD in progress: Ken Deguernel, "Apprentissage de structures musicales en situation d'improvisation", March 2015, Emmanuel Vincent and Gérard Assayag.

PhD in progress: Amal Houdidhek, "Élaboration et analyse d'une base de parole arabe pour la synthèse vocale", December 2015, Denis Juvet and Vincent Colotte (France) and Zied Mnasri (Tunisia).

PhD in progress: Imène Zangar, "Amélioration de la qualité de synthèse vocale par HMM pour la parole arabe", December 2015, Denis Juvet and Vincent Colotte (France) and Zied Mnasri (Tunisia).

PhD in progress: Mathieu Fontaine, "Processus alpha-stable pour le traitement du signal", May 2016, Antoine Liutkus and Roland Badeau (Télécom ParisTech).

PhD in progress: Amine Menacer, "Traduction automatique de vidéos", May 2016, Kamel Smaïli and Denis Juvet.

PhD in progress: Anastasiia Tsukanova, "Coarticulation modeling in articulatory synthesis", May 2016, Yves Laprie.

PhD in progress: Nathan Libermann, "Deep learning for musical structure analysis and generation", October 2016, Frédéric Bimbot and Emmanuel Vincent.

PhD in progress: Yang Liu, "Merging acquisition and processing of cineMRI of the vocal tract", October 2016, Pierre-André Vuissoz and Yves Laprie.

### 10.2.3. Participation in HDR and PhD juries

Participation in PhD thesis Jury for David Guennec (Université Rennes 1, September 2016), Y. Laprie.

Participation in PhD thesis Jury for Ugo Marchand (Université Paris 6, November 2016), E. Vincent, reviewer.

Participation in PhD thesis Jury for Joachim Flocon-Cholet (Université Rennes 1, June 2016), E. Vincent, reviewer.

Participation in PhD thesis Jury for Aly Magassouba (Université Rennes 1, December 2016), E. Vincent, reviewer.

Participation in PhD thesis Jury for Diandra Fabre (Université Grenoble Alpes, December 2016), S. Ouni, reviewer.

Participation in PhD thesis Jury for Ivana Didirková (Université Montpellier 3, December 2016), Y. Laprie, reviewer.

#### **10.2.4. Participation in other juries**

Chairman of Scientific « Baccalauréat », specialty Earth Sciences (Académie de Nancy-Metz and Université de Lorraine, July 2016), A. Piquard-Kipffer.

Participation in the Competitive Entrance Examination into Speech-Language Pathology Department (University of Lorraine, June 2016), A. Piquard-Kipffer.

### **10.3. Popularization**

Demonstration at Village Sciences LORIA, March 2016 (K. Deguernel, E. Vincent, S. Ouni).

Demonstration at Forum des métiers, Collège Peguy, Le Chesnay, March 2016 (A. Piquard-Kipffer).

Demonstration at EHESP-University of Sorbonne- Paris Cité, March 2016 (A. Piquard-Kipffer).

Demonstration at LORIA's 40th Anniversary, June 2016 (K. Deguernel, E. Vincent).

"Démixer la musique", Interstices, January 2016 (A. Liutkus and E. Vincent).

Intervention lors d'une action pour la Maison pour la Science en Lorraine au service des professeurs (A. Bonneau)

Démonstration lors de la journée Rencontre Inria Industrie sur le thème « Ed-Techs au service de e-Education », December 2016 (D. Jouvét)



## PANAMA Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

Rémi Gribonval is a member of the IEEE Technical Committee on Signal Processing Theory and Methods (2012–2017), and a member of the Awards sub-committee.

Rémi Gribonval is a member of the program committee of the GRETSI.

Rémi Gribonval is a member of the Steering Committee of the SPARS international workshop (chairman until 2013).

Frédéric Bimbot is the Head of the "Digital Signals and Images, Robotics" department in IRISA (UMR 6074).

Frédéric Bimbot is a member of the International Advisory Council of ISCA (International Speech Communication Association).

Rémi Gribonval and Frédéric Bimbot are the scientific coordinators of the Science and Music Day (Journée Science et Musique) organized by IRISA.

Antoine Deleforge organized and co-chaired with Prof. Sharon Gannot (Bar-Ilan University) a special session on "Learning-Based Sound Source Localization and Spatial Information Retrieval" at ICASSP 2016, Shanghai, China.

N. Bertin, A. Deleforge, and R. Gribonval co-organized a special session entitled "From Source Position to Room Properties : Learning Methods for Audio Scene Geometry Estimation", at the 2017 LVA/ICA Conference, Grenoble, February 2017

R. Gribonval was the organizer of a special session on "Multiscale Factorizations and Learning", at the 2016 IEEE Information Theory Workshop, Cambridge, UK, September 2016

R. Gribonval was guest editor of a special issue of IEEE Journal on Selected Topics in Signal Processing, on Structured Matrices in Signal and Data Processing.

F. Bimbot was an invited speaker at the Dagstuhl Seminar 16092 on Computational Music Structure Analysis (February 2016, Dagstuhl, Germany)

R. Gribonval was an invited speaker at the London Workshop on Sparse Signal Processing (Imperial College, September 2016), the DALI (Data Learning and Inference) Workshop on Learning Theory (Sestri Levante, March 2016), the Workshop on Computational and Statistical Trade-offs in Learning (IHES, Bures-sur-Yvette, March 2016), and the Workshop on Low Complexity Models in Signal Processing (Hausdorff Institute, Bonn, February 2016).

R. Gribonval is a member of the jury of the GDR ISIS / GRETSI / Club EAA thesis prize in signal and image processing since 2014.

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

Bachelor : N. Bertin, "Discovery of selected topics in audio signal processing research", 6 hours, L3, École Supérieure de Réalisation Audiovisuelle (ESRA), France.

Master : N. Bertin, "Audio rendering, coding and source separation", 6 hours, M2, Université Rennes 1, France.

Master : N. Bertin, "Audio indexing and classification", 6 hours, M2, Université Rennes 1, France.

Master : N. Bertin, "Fundamentals of Signal Processing", 24 hours, M1, Ecole Normale Supérieure de Bretagne, Rennes, France.

Master : N. Bertin, "Sparse representations and compressive sensing", 15 hours, M2, Ecole Nationale de la Statistique et de l'Analyse de l'Information, Rennes, France.

Master : N. Bertin, "Sparsity in Signal and Image Processing", 10 hours, M1, Ecole Normale Supérieure de Bretagne, Rennes, France.

Master : N. Bertin, "Sparsity in Signal and Image Processing", 12 hours, M2, Institut National des Sciences Appliquées (INSA) de Rennes, France.

Master : R. Gribonval, "Signal and image representations", 8 hours, M2, Université Rennes 1, France.

Master: R. Gribonval, coordination of the ARD module "Acquisition et Représentation de Données", 20hours, M2, Université Rennes 1, France.

Master : R. Gribonval, "Sparsity in Signal and Image Processing", 6 hours, M2, Institut National des Sciences Appliquées (INSA) de Rennes, France.

Master : R. Gribonval, coordination of the module "Sparsity in Signal and Image Processing", 48 hours, M2, Institut National des Sciences Appliquées (INSA) de Rennes, France.

Bachelor : A. Deleforge, "Discovery of selected topics in audio signal processing research", 6 hours, L3, École Supérieure de Réalisation Audiovisuelle (ESRA), France.

Master : A. Deleforge, "Sparsity in Signal and Image Processing", 4 hours, M2, Institut National des Sciences Appliquées (INSA) de Rennes, France.

## 10.3. Popularization

### 10.3.1. Journée Science et Musique

**Participants:** Antoine Deleforge, Rémi Gribonval, Frédéric Bimbot, Romain Lebarbenchon, Adrien Leman, Nicolas Bellot, Clément Gaultier, Nancy Bertin, Nicolas Keriven, Ewen Camberlein, Luc Le Magoarou, Armelle Mozziconacci, Stéphanie Lemaile, Corentin Louboutin, Nicolas Tremblay, Corentin Guichaoua, Srdan Kitic.

*with contributions and support from: Valérie Gouranton, Laurent Perraudeau, Nathalie Denis, Evelyne Orain, Agnès Cottais, and many more.*

PANAMA coordinated the organization of a public event called "Journée Science et Musique" ("Music and Science Day"). This yearly event organized by the METISS/ PANAMA Team since 2011 aims at sharing with the wide audience the latest innovations and research projects in music. The motivation for hosting this event is to explain and promote the technology behind audio-processing that people face in their daily lives. The event is free to everyone and people have the possibility to attend talks by selected speakers or meet numerous experts that demonstrate current projects in which people can interactively participate. Edition 2016 hosted more than 500 visitors and was the official opening event of the "Festival des Sciences" week in Rennes.

## SEMAGRAMME Project-Team

## 8. Dissemination

### 8.1. Promoting Scientific Activities

#### 8.1.1. Scientific Events Organisation

##### 8.1.1.1. General Chair, Scientific Chair

MAXIME AMBLARD: LACL 2016 *Logical Aspects of Computational Linguistics 2016*.

##### 8.1.1.2. Member of the Organizing Committees

PHILIPPE DE GROOTE: LACL 2016 *Logical Aspects of Computational Linguistics 2016*.

SYLVAIN POGODALLA: LACL 2016 *Logical Aspects of Computational Linguistics 2016*.

#### 8.1.2. Scientific Events Selection

##### 8.1.2.1. Chair of Conference Program Committees

SYLVAIN POGODALLA: co-chair of FG 2016 *21st Conference on Formal Grammar* [19]; co-chair of LACL 2016 (*Logical Aspects of Computational Linguistics 2016*) [18]

MAXIME AMBLARD: co-chair of LACL 2016 (*Logical Aspects of Computational Linguistics 2016*) [18]

##### 8.1.2.2. Member of the Conference Program Committees

PHILIPPE DE GROOTE: FG 2016, *21st Conference on Formal Grammar*; NLCS'16, *Fourth Workshop on Natural Language and Computer Science*; LACL 2016 *Logical Aspects of Computational Linguistics 2016*.

MAXIME AMBLARD: LACL 2016 *Logical Aspects of Computational Linguistics 2016*; TALN 2016 *Traitement Automatique des Langues 2016*; RECITAL 2016 *Rencontre des Étudiants Chercheurs en Informatique pour le Traitement Automatique des Langues*.

GUY PERRIER: HfTAL2016 *10th International Conference on Natural Language Processing*.

##### 8.1.2.3. Reviewer

PHILIPPE DE GROOTE: FG 2016, *21st Conference on Formal Grammar*; NLCS'16, *Fourth Workshop on Natural Language and Computer Science*; LACL 2016 *Logical Aspects of Computational Linguistics 2016*.

SYLVAIN POGODALLA: NISM 2016 *New Ideas in Semantics and Modelisation*; Cognitive Structures: Linguistic, Philosophical and Psychological Perspectives; FG 2016 *21st Conference on Formal Grammar*; LACL 2016 *Logical Aspects of Computational Linguistics 2016*.

MAXIME AMBLARD: LACL 2016 *Logical Aspects of Computational Linguistics 2016*; TALN 2016 *Traitement Automatique des Langues 2016*; RECITAL 2016 *Rencontre des Étudiants Chercheurs en Informatique pour le Traitement Automatique des Langues*.

GUY PERRIER: HfTAL2016 *10th International Conference on Natural Language Processing*; LACL 2016 *Logical Aspects of Computational Linguistics 2016*.

#### 8.1.3. Journal

##### 8.1.3.1. Member of the Editorial Boards

PHILIPPE DE GROOTE: area editor of the *FoLLI-LNCS series*; associate editor of *Higher-Order and Symbolic Computation*; member of the editorial board of *Cahiers du Centre de Logique*.

SYLVAIN POGODALLA: Member of the editorial board of the journal *Traitement Automatique des Langues*, in charge of the *Résumés de thèses* section.

MAXIME AMBLARD: Member of the editorial board of the journal *Traitement Automatique des Langues*, in charge of the final editing process

#### 8.1.3.2. Reviewer - Reviewing Activities

PHILIPPE DE GROOTE: *Journal of Logic, Language and Information*; *Journal of Applied Logic*.

SYLVAIN POGODALLA: *Journal of Language Modelling*; *Traitement Automatique des Langues*.

MAXIME AMBLARD: *Traitement Automatique des Langues*.

#### 8.1.4. Invited Talks

MAXIME AMBLARD: *Sémantique : modélisation formelle et interprétation de données empiriques*, ATILF, Nancy; *L'informaticien face au traitement du langage : que peut-on faire et que croit-on que nous faisons ?*, at the occasion of *Images du savoir pratique : les figures de l'informaticien et du médecin dans les récits de fiction populaire contemporains*, IRIST, Strasbourg.

#### 8.1.5. Leadership within the Scientific Community

PHILIPPE DE GROOTE: vice president of SIGMOL, *Association for Mathematics of Language, a Special Interest Group of the Association for Computational Linguistics*; member of the LACL steering committee.

BRUNO GUILLAUME: nominated as a Management Committee Substitute of the COST Action CA16105 "European Network for Combining Language Learning with Crowdsourcing Techniques" ([http://www.cost.eu/COST\\_Actions/ca/CA16105](http://www.cost.eu/COST_Actions/ca/CA16105))

SYLVAIN POGODALLA: member of the LACL steering committee; member of the Formal Grammar standing committee.

#### 8.1.6. Scientific Expertise

PHILIPPE DE GROOTE: expert for the FNRS, *Fond National de la Recherche Scientifique*, Belgium; expert for the *National Science Center*, Poland.

SYLVAIN POGODALLA: expert for the Research Executive Agency (REA) of the EU.

MAXIME AMBLARD: member of the PhD award of ATALA

#### 8.1.7. Research Administration

PHILIPPE DE GROOTE: member of the *bureau du comité des projets d'Inria-Nancy*.

BRUNO GUILLAUME:

- Head of the Loria department NLPKD (Natural Language Processing and Knowledge Discovery)
- Animator of the CPER 2015-2020 project *Langues, Connaissances et Humanités Numériques* (Languages, Knowledge and Digital Humanities) in which ten laboratories of the *Université de Lorraine* are implied.
- Elected member of the *Pôle scientifique AM2I* of the Université de Lorraine.
- Member of the Comipers (Inria committee for PhD and Post-doctoral selection).

MAXIME AMBLARD:

- member of *conseil scientifique de l'Université de Lorraine*.
- member of *conseil de laboratoire du Loria*
- member of *conseil de gestion de la Maison des sciences de l'homme, MSH-Lorraine*
- head of the master (M2) in Natural Language Processing.
- in charge of the proposal of a new master in NLP.

## 8.2. Teaching - Supervision - Juries

### 8.2.1. Teaching

Licence: Maxime Amblard, Formalismes de représentation et raisonnement, 25h, L3, Université de Lorraine, France

Licence: Maxime Amblard, C2i, 20h, L1, Université de Lorraine, France

Licence: Jirka Maršík, Ingénierie linguistique, 25h, L3, Université de Lorraine, France

Master: Maxime Amblard, Formalisms : from Syntax to Discourse, 50h, M2, Univ. Lorraine, France

Master: Maxime Amblard, Remise à niveau TAL, 6h, M2, Université de Lorraine, France

Master: Maxime Amblard, Programming for NLP, 44h, M1, Université de Lorraine, France

Master: Philippe de Groote, Formal logic, 35h, M2, Université de Lorraine, France.

Master: Philippe de Groote, Computational structures and logics for natural language modelling, 18h, M2, Université Paris Diderot, France.

Master : Bruno Guillaume, NLP Toolchain and Linguistic Resources, 15h, M2, Université de Lorraine, France.

Master: Jirka Maršík, IA fondamentale : représentation des connaissances et fouille de données, 11h30, M1, Université de Lorraine, France

Master: Jirka Maršík, Communication scientifique, 15h30, M1, Université de Lorraine, France

Master: Jirka Maršík, Cognitive Aspect of Computational Linguistic, 15h, M2, Université de Lorraine, France

Master: Jirka Maršík, Aspects cognitives de la linguistique computationnelle, 16h30, M2, Université de Lorraine, France

Master: Jirka Maršík, Remise à niveau TAL, 10h, M2, Université de Lorraine, France

Master : Sylvain Pogodalla, Formal Languages, 24h, M2, Université de Lorraine, France.

### 8.2.2. Supervision

HdR: Maxime Amblard, Sémantique et discours, de la modélisation à l'interprétation, Université de Lorraine, November 28th, 2016, Philippe de Groote.

PhD: Jirka Maršík, Effects and Handlers in Natural Language, Université de Lorraine, December 9th, 2016, Philippe de Groote and Maxime Amblard.

PhD: Aleksandre Maskharashvili, Discourse Modeling with Abstract Categorical Grammars, Université de Lorraine, December 1st, 2016, Philippe de Groote and Sylvain Pogodalla.

PhD in progress: Clément Beysson, Quantificateurs généralisés dynamiques pour l'analyse discursive, since september 2015, Philippe de Groote and Bruno Guillaume.

### 8.2.3. Juries

PHILIPPE DE GROOTE was member of the jury of the HdR of Maxime Amblard, *Sémantique et discours, de la modélisation à l'interprétation* [6], November 28th, 2016, Université de Lorraine.

PHILIPPE DE GROOTE was member of the jury of the PhD thesis of Aleksandre Maskharashvili, *Discourse Modeling with Abstract Categorical Grammars* [8], December 1st, 2016, Université de Lorraine.

PHILIPPE DE GROOTE was member of the jury of the PhD thesis of Jirka Maršík, *Effects and Handlers in Natural Language* [7], Université de Lorraine, December 9th, 2016, Université de Lorraine.

SYLVAIN POGODALLA was member of the jury of the PhD thesis of Aleksandre Maskharashvili, *Discourse Modeling with Abstract Categorical Grammars* [8], December 1st, 2016, Université de Lorraine.

MAXIME AMBLARD was member of the jury of the PhD thesis of Jirka Maršík, *Effects and Handlers in Natural Language* [7], Université de Lorraine, December 9th, 2016, Université de Lorraine.

GUY PERRIER was member of the jury of the PhD thesis of Bikash Gyawali *Surface Realisation from Knowledge Bases*, January 20, 2016, Université de Lorraine.

### 8.3. Popularization

- Maxime Amblard is scientific vice head of the editorial board of *interstice* <sup>ji</sup>, a french magazine popularizing computer sciences. He is the head of the rubric *informatique —ou presque— dans les films*.
- Maxime Amblard was scientific expert for the exhibition *Homo Numericus*.
- Bruno Guillaume was invited twice to present and lead an open discussion about Citizen Science: *Séminaire ESPÉ DANE : la pépinière 4.0*, in January, and *Séminaire ESPÉ DANE : la pépinière 4.1*, in October.
- Bruno Guillaume was invited in July to a panel discussion about Citizen Science, *Les rendez-vous de Science&You*.

## CHROMA Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. General Chair, Scientific Chair

- O. Simonin was co-chair of the Workshop DEMUR "On-line decision-making in multi-robot coordination" at International Conf. RSS, Ann Arbor, University of Michigan, June 2016.
- O. Simonin was General chair of the 2eme Journée nationale Robotique & IA., Clermont-Ferrand, RFIA 2016, 27 juin 2016.
- C. Laugier, Ph. Martinet, C. Stiller and U. Nunes, organized a workshop entitled "8th Workshop on Planning, Perception and Navigation for Intelligent Vehicles - A bridge between Robotics and ITS technologies" at IEEE ITSC 2016, Rio de Janeiro, November 1st 2016 (about 90 attendees).
- C. Laugier has been appointed as Program co-chair for IEEE/RSJ IROS 2018 (Madrid) and General co-Chair of IEEE/RSJ IROS 2019 (Hong Kong).

#### 10.1.1.2. Member of the Organizing Committees

- C. Laugier was Associate Editor for IEEE/RSJ IROS 2016, for IEEE ICRA 2016, and for IEEE ITSC 2016.

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Member of the Conference Program Committees

- Jilles S. Dibangoye was Program Committee member of the following conferences:
  - International Joint Conference on Artificial Intelligence (IJCAI)
  - Autonomous Agent and Multi-agent Systems International Conference (AAMAS)
- O. Simonin is Program Committee member for Autonomous Agent and Multi-agent Systems International Conference (AAMAS) Special Track Robotics.
- O. Simonin is Program Committee member of the JFSMA conference since 2008 (Journées Franco-phones sur les Systèmes Multi-Agents).

#### 10.1.2.2. Reviewer

- A. Martinelli served, in quality of reviewer, at the following international conferences: ICRA 2016, IROS 2016, ACC 2016.
- O. Simonin served, in quality of reviewer, at the following international conferences : IROS 2016, ICRA 2016.

### 10.1.3. Journal

#### 10.1.3.1. Member of the Editorial Boards

- C. Laugier is Member of the Steering Committee of the journal IEEE Transaction on Intelligent Vehicles.
- C. Laugier Senior Editor of the journal IEEE Transaction on Intelligent Vehicles.
- C. Laugier is member of the Editorial Board of the journal IEEE ROBOMECH
- O. Simonin is a member of the editorial board of RIA Revue d'Intelligence Artificielle.

#### 10.1.3.2. Reviewer - Reviewing Activities

- A. Martinelli served, in quality of reviewer, for the following journals: Transaction on Automation Science and Engineering, IEEE Robotics and Automation Letters.
- Jilles S. Dibangoye served as a reviewer for the following journals: Journal on Artificial Intelligence Research (JAIR), Artificial Intelligence Journal (AIJ), IEEE Transactions on Robotics (TRO).
- O. Simonin serves, in quality of reviewer, for Autonomous Robots Journal (AURO) and the Revue d'Intelligence Artificielle (RIA).

#### **10.1.4. Invited Talks**

Anne Spalanzani was invited to give a talk at

- Xerox (Meylan), september 2016.
- the conference RFIA (Clermont Ferrand), June 2016.
- the journées scientifique d'Inria (Rennes), June 2016.

Agostino Martinelli was invited to give a talk at

- Centro Piaggio, University of Pisa, June 2016, "Nonlinear Unknown Input Observability: the General Analytic Solution".
- Automation Lab, University of Tor Vergata, Rome, December 2016, "Nonlinear Unknown Input Observability: the General Analytic Solution".
- Vision and Perception lab., University of Zurich, December 2016, "Visual-Inertial Sensor Fusion".

Christian Laugier was invited to give a talk at

- IEEE ICIT 2016, Session on Cognitive Systems and Automation for Service Robotics and Intelligent Mobility, Taipei, March 2016, "Bayesian Perception & Decision for Autonomous Vehicles and Mobile Robots".
- Mediatek International Company, Hsinchu, Taiwan, March 15th 2016, "Bayesian Perception Technologies and Industrial Applications".
- City-U Seminar, Hong Kong, April 22nd 2016, "Bayesian Perception & Decision for Autonomous vehicles and Mobile Robots".
- Robotics Symposium, CUHK, T-Stone Robotics Institute, Hong Kong, April 21-22 2016, "Embedded Bayesian Perception & Decision-making for Autonomous Mobility in Dynamic Human Environments".
- IEEE ARSO 2016, Plenary talk, Shanghai, July 2016, "Towards Fully Autonomous Driving ? The Perception & Decision-Making Bottleneck".

Olivier Simonin was invited to give a talk at

- Université de Babes-Bolyai, Cluj-Napoca, Romania, July 2016.
- Workshop SAMPEN, Lyon, Januray 27, 2016.
- Robotics Times Connect, Lyon, December 7, 2016.

#### **10.1.5. Leadership within the Scientific Community**

- C. Laugier is co-chair with Philippe Martinet and Christoph Stiller, of the IEEE RAS Technical Committee on "Autonomous Ground Vehicles and Intelligent Transportation Systems (AGVITS)".
- C. Laugier is member of the Committee "safety of autonomous vehicles" (committee led by ARDI in the scope of the Innovation Regional Strategy).

#### **10.1.6. Scientific Expertise**

- C. Laugier has been invited as a panel member of the evaluation committee of "Beijing Institute of Technology (BIT)". A three days evaluation seminar has been held in Beijing on November 9-11, 2016.
- C. Laugier is Scientific Consultant for the Probayes company.



- O. Simonin is member of the 2017 ANR scientific committee.

### 10.1.7. Research Administration

- C. Laugier is a member of several Ministerial and Regional French Committees on Robotics and Autonomous Cars.
- O. Simonin is member of the Rhone-Alpes Robotics cluster (Coboteam), for Inria and INSA de Lyon entities.
- A. Martinelli carried out the activity of leader for the ANR project VIMAD
- A. Martinelli carried out the activity of leader for the CARNOT project SEDIA

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

INSA Lyon 5th year : O. Simonin, resp. of the Robotics option : AI for Robotics, Software and Hardware for robotics, Robotics projects, 50h, M2, Dept. Telecom INSA de Lyon, France.

INSA Lyon 3rd year : O. Simonin, Algorithmique et programmation, 20h, L3, Dept. Telecom INSA de Lyon, France.

M2R MoSIG: A. Martinelli, Autonomous Robotics, 12h, ENSIMAG Grenoble

INSA Lyon 5th year : A. Spalanzani, Navigation en environnement humain, 2h, M2, INSA de Lyon, France.

#### E-learning

### 10.2.2. Supervision

PhD in progress: Tiana Rakotovao Andriamahefa, Embedded Bayesian Perception on a Multi-core Architecture, 2013, C. Laugier and D. Ruspini (CEA LETI).

PhD in progress: David Sierra Gonzalez, Autonomous Driving, 2014, E. Mazer (Inria Prima), J. Dibangoye, C. Laugier (cooperation Toyota).

PhD in progress: Mathieu Barbier, Decision making for Intelligent Vehicles, 2015, E. Mazer (Inria Prima), O. Simonin, C. Laugier (cooperation Renault)

PhD in progress: Vishnu K. Narayanan, semi-autonomous navigation of a electric wheelchair using visual servoing and user intention analysis, 2013, M. Babel (Lagadic Team) and A. Spalanzani.

PhD in progress: Stefan Chitic, Middleware for multi-robot systems, 2013, O. Simonin, J. Ponge (CITI-Dynamid), Ministry funding.

PhD in progress: Pavan Vasishta, behavioral modeling in urban environments. A. Spalanzani and D. Vaudreydaz (Pervasive Interaction), started in Feb. 2016.

PhD in progress: Mihai Popescu, Robot fleet mobility under communication constraints, 2015, O. Simonin, A. Spalanzani, F. Valois (Agora), Regional funding.

Starting PhD: Guillaume Bono, Global-local Optimization Under Uncertainty for Goods Distribution Using a Fleet of Autonomous Vehicles, O. Simonin, J. Dibangoye, L. Matignon, INSA-Volvo Chair funding.

Starting PhD: Remi Cambuzat, Robots de TELéprésence : Navigation Sociale et Interaction VERbale immersives, G. Bailly (CNRS GIPSA lab), A. Spalanzani, O. Simonin, Regional funding.

### 10.2.3. Juries

- O. Simonin was a member (president) of the defense committee of the PhD thesis of Emmanuel Hermellin, Univ. de Montpellier, LIRMM, November 18, 2016.
- O. Simonin was a member of the defense committee of the PhD thesis of Arnaud Paris, Université d'Orléan, Labo PRISME, Bourges, October 17, 2016.

- O. Simonin was a member of the defense committee of the PhD thesis of Patrick Bechon, Université de Toulouse, ISAE Supaero, May 26, 2016.
- O. Simonin was a member (president) of the defense committee of the PhD thesis of Osamah Saif, Université de Technologie de Compiègne UTC, March 23, 2016.
- O. Simonin was a member (president) of the defense committee of the PhD thesis of Zhicheng Hou, Université de Technologie de Compiègne UTC, February 10, 2016.
- A. Spalanzani was a reviewer and a member of the defense committee of the PhD thesis of Omar Adair Islas Ramirez, Université Pierre et Marie Curie, November 28th, 2016.
- A. Spalanzani was a member of the defense committee of the PhD thesis of Suman Raj Bista, Université de Rennes 1, December 20th, 2016.
- C. Laugier was reviewer and member of the defense committee of the PhD thesis of Alexandre Armand (ENSTA ParisTech, May 31 2016).

## DEFROST Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. Member of the Conference Program Committees

- Jeremie Dequidt is member of the CP committee of the AFIG (Association Française d'Informatique Graphique) conference and VRIPHYS conference
- Christian Duriez is member of the CP committee of Eurohaptics

#### 10.1.1.2. Reviewer

- Jeremie Dequidt has been reviewer for International Journal of Computer Assisted Radiology and Surgery (IJCARS) and AFIG 2016
- Damien Marchal has been reviewer for IEEE 3D User Interface 2016 (3DUI 2016) and EuroHaptic 2016.
- Christian Duriez has been reviewer for the conferences IEEE VR 2016 and ICRA 2017.

### 10.1.2. Journal

#### 10.1.2.1. Member of the Editorial Boards

- Christian Duriez is member of the editorial board of IEEE Transaction on Haptics

#### 10.1.2.2. Reviewer - Reviewing Activities

- Christian Duriez has been reviewer for the journals ACM Transaction on Graphics, Computer and Graphics, IEEE Transactions on Robotics, Soft Robotic Journal (SORO).

### 10.1.3. Invited Talks

- Christian Duriez and Thor Bieze were invited for a talk at the Spring School on Soft-robotics at Livorno (April 2016)
- Christian Duriez was invited for a talk at the conference POSS in Paris (november 2016).

### 10.1.4. Scientific Expertise

Christian Duriez is a scientific advisor of InSimo (Inria Spin-off)

### 10.1.5. Research Administration

Christian Duriez is vice-responsible of Research Jobs Committee at Inria Lille.

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

Licence : Jeremie Dequidt, Programming, 54h, L3, University of Lille/Polytech Lille, France

Licence : Jeremie Dequidt, Advance Programming, 16h, L3, University of Lille/Polytech Lille, France

Licence : Jeremie Dequidt, Databases, 12h, L3, University of Lille/Polytech Lille, France

Licence : Frederick Largilliere, Computer science fundamentals, 48h, L1, University of Lille 3, France

Licence : Frederick Largilliere, Certificate of computer science and internet knowledge, 27.5h, L2 - L3, University of Lille 3, France

Master : Jeremie Dequidt, Theoretical Computer Science, 24h, M1, University of Lille/Polytech Lille, France

Master : Jeremie Dequidt, Surgical Simulation, 12h, M2, University of Lille/Polytech Lille, France

Master : Thor Morales Bieze, Bio-inspired robotics, 20h, M2, University of Lille/Polytech Lille, France

Master : Damien Marchal, Reality-Virtual et Interaction, 20h, M2, University of Lille, France

Master : Christian Duriez, Interactive physics-based engines, M2, University of Lille, France

### 10.2.2. Supervision

PhD in progress: Frederick Largilliere, Stiffness control of interfaces based on soft robots through numerical modelization, 01/11/2013, Laurent Grisoni, Christian Duriez

PhD in progress: Thor Morales Bieze, Design, modeling and control of soft, continuum manipulators, 10/10/2013, Rochdi Merzouki, Christian Duriez

PhD in progress: Zhongkai Zhang, Visual servoing control of soft robots based on real-time Finite Element Method, 01/10/2015, Jeremie Dequidt, Christian Duriez

PhD in progress: Maxime Thieffry, High velocity control of soft robots, 01/10/2016, Christian Duriez, Alexandre Kruszewski, Thierry Marie Guerra

### 10.2.3. Juries

- Christian Duriez was president of the committee of the PhD jury of José Dolz (University of Lille 2)
- Christian Duriez was reviewer of the PhDs of Johan Sarrazin (University of Grenoble) and Pierre-Luc Manteaux (University of Grenoble)
- Christian Duriez was examiner of the PhD of Zilong Shao (University of Lille)

## 10.3. Popularization

- Olivier Goury and Christian Duriez participated in "Fête de la science: Opération Chercheurs itinérants", which involves giving scientific lectures in middle and high schools.
- Christian Duriez and Mario Sanz Lopez participated in the "Bourse aux Technologies" at Bercy, Paris (22 March).
- Popularization session 13:45 on the topic of Arduino by Mario Sanz Lopez.
- Popularization session 13:45 on the topic of Software development good practices by Bruno Carrez.
- Damien Marchal participated in "Chti'Code". Chti'Code is an action of the University of Lille 1, which aims to promoting computer education in primary schools. Damien Marchal intervened with computer science student in 4 CM2 classes for a total of 20h.
- Jeremie Dequidt was jury member of the second robotic competition SI / @ Baggio.

## FLOWERS Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. General Chair, Scientific Chair

- PY. Oudeyer and M. Lopes have been general co-chair of Second Interdisciplinary Symposium on Information Seeking, Curiosity and Attention (Neurocuriosity 2016), London, UK (150 participants). <https://goo.gl/BYL0h4>
- D. Roy has been general chair of the colloquium "Robotique et Education" in Bordeaux, June 2016, <http://dm1r.fr/colloque-robotique-education/>.

#### 10.1.1.2. Member of the Organizing Committees

- Manuel Lopes co-organized the R:SS 2016 workshop on Bootstrapping Manipulation Skills 06.2016 <http://www.bootstrapping-manipulation.com/>
- Alexander Gepperth co-organized a special session ("Incremental learning algorithms and application") on ESANN 2016, together with Barbara Hammer of Bielefeld university (Germany).
- PY. Oudeyer has been member of the steering committee of the IEEE ICDL-Epirob conference.
- PY. Oudeyer has been member of the steering committee of the fOSSa conference.
- PY. Oudeyer has been "Robotics Liaison" of IJCNN 2017, Anchorage, Alaska.

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Member of the Conference Program Committees

- David Filliat was Associate Editor for IROS.
- PY. Oudeyer has been member of the PC committee of IEEE ICDL-Epirob 2016.
- Alexander Gepperth was member of the program committee for IJCNN 2016, ECAI 2016 and ESANN 2016.

#### 10.1.2.2. Reviewer

- David Filliat was reviewer for the IFAC, IV, RFIA, ICRA conferences.
- Sébastien Forestier was reviewer for IEEE ICDL-Epirob
- Manuel Lopes was reviewer for IEEE IROS, IEEE ICDL-EPIROB, IEEE ICRA, IJCAI, NIPS
- Thibaut Munzer was reviewer for IEEE IJCAI.
- Baptiste Busch reviewer for IEEE RO-MAN.
- PY. Oudeyer has been a reviewer for the conferences IEEE ICDL-Epirob and Humanoids 2016.
- Alexander Gepperth was reviewer for ESANN 2016, IJCNN2016, IEEE Symposium on Intelligent Vehicles (IV) and ECAI 2016

### 10.1.3. Journal

#### 10.1.3.1. Member of the Editorial Boards

- PY. Oudeyer has been editor of IEEE CIS Newsletter on Cognitive and Developmental Systems: <https://openlab-flowers.inria.fr/t/ieee-cis-newsletter-on-cognitive-and-developmental-systems/129>
- PY. Oudeyer has been associate editor of IEEE Transactions on Cognitive and Developmental Systems

- PY Oudeyer has been associate editor of Robotics and Automation Letters (RA-L).
- PY. Oudeyer has been associate editor of Frontiers in Neurorobotics and Frontiers in Humanoid Robotics.
- PY. Oudeyer has been Associate editor of International Journal of Social Robotics (Springer).

#### 10.1.3.2. Reviewer - Reviewing Activities

- David Filliat was reviewer for Journal of Intelligent Service Robotics.
- Alexander Gepperth was reviewer IEEE Transactions on Intelligent Transportation Systems
- Anna-Lisa Vollmer was reviewer for Frontiers in Robotics and AI and IEEE Transactions on Cognitive and Developmental Systems.
- PY. Oudeyer has been a reviewer for the Robotics and Automation Magazine, the Journal of Language Evolution.

#### 10.1.4. Invited Talks

- David Filliat gave an invited presentation “Apprentissage pour les vehicules intelligents et la robotique developpementale” during the workshop “Intelligence Artificielle et Véhicule à Conduite Delegatee” organized by VEDECOM on september 28th.
- PY. Oudeyer, "Open-source art/science with Poppy Project", 15th january, Journée ECARTS, Univ. Bordeaux.
- PY. Oudeyer, "Mondes Mosaiques", Librairie Mollat, 2 février, Bordeaux.
- PY. Oudeyer, "Self-organization and active learning of language", 21 mars, Lattice, ENS Paris.
- PY. Oudeyer, "Intelligence artificielle et robotique", 21 mars, Grand Palais, Paris.
- PY. Oudeyer, "Intelligence artificielle et philosophie", 20 mai, Bordeaux.
- PY Oudeyer, "How robotic modelling can help us understand complex dynamics in development", 22 may, Views by Two keynote, International Conference on Infant Studies, New-Orleans.
- PY. Oudeyer, "Robotique éducative: les projets de l'équipe Flowers", Colloque Robotique et Education, Bordeaux.
- PY. Oudeyer, "Curiosity, exploration and learning in humans and machines", 9 july, ISSAS Summer School, Geneva, Switzerland.
- PY. Oudeyer, "How robotic modelling can help us understand complex dynamics in language and sensorimotor development", 9th september, Creativity and Evolution Summer School, Como, Italy.
- PY Oudeyer, "Comment la modélisation robotique aide à comprendre la dynamique du développement de l'enfant", 18 septembre, Colloque Biologie et Information, Cerisy, France.
- PY. Oudeyer, "Active exploration for lifelong developmental learning in humans and machines: intrinsic motivation, maturation and social guidance", 5th october, Google Deepmind seminar, London, UK.
- PY. Oudeyer, "Diversity of forms and developmental functions of curiosity-driven exploration", 8th october, London UK.
- PY. Oudeyer, "Intelligence artificielle et humain", Entretiens de la Cité, 5th november, Lyon, France.
- PY. Oudeyer, "Artificial intelligence and robotics: scientific, technological and societal challenges", 8th november, Académie des Technologies, Paris, France.
- PY. Oudeyer, "From fundamental research in models of human learning to educational applications", 16th november, Journée Learning Lab, Paris, France.
- PY. Oudeyer, "Diversity of forms and developmental functions of curiosity-driven exploration", 17th november, Journée GdR Robotique et Neurosciences, Bordeaux.
- PY. Oudeyer, "Machine learning and robotics", 5th december, Technion ConnectedWorld conference, Paris.

#### 10.1.5. Leadership within the Scientific Community

PY. Oudeyer has been chair of IEEE Computational Intelligence Society technical committee on cognitive and developmental systems (10 task forces, 65 members); The activities of the TC are described at: <https://openlab-flowers.inria.fr/t/ieee-cis-tc-on-cognitive-and-developmental-systems/41>

### 10.1.6. Scientific Expertise

- M Lopes was expert for the EU Commission scientific programme.
- PY. Oudeyer has been an expert for the European Commission, the Polish National Research Agency, and the Swedish National Research Agency.
- PY. Oudeyer has been expert for Main à la Pâte for the textbook project “1, 2, 3: Codez!” to teach computer science in primary schools.
- PY. Oudeyer has been expert for Académie des Technologies and OPECST on artificial intelligence and its interaction with society.

### 10.1.7. Research Administration

PY. Oudeyer has been scientific responsible of Inria-Ensta-ParisTech EPC.

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

Master: Robotique Developmental et Cognitive, 35 heures, Nantes, (Manuel Lopes et PY Oudeyer)  
 Master: Robotique Developmental et Cognitive, 35 heures, Universite de Bordeaux, (Manuel Lopes et PY Oudeyer)  
 License: Inteligencia Artificial, 90 heures, Instituto Superior Tecnico, Lisboa, (Manuel Lopes)  
 License: Introduction to Matlab, 21 heures. L3, ENSTA - ParisTech (David Filliat).  
 Master: Robotique Mobile, 21 heures. M2, ENSTA - ParisTech (David Filliat).  
 Master: Perception pour la Robotique, 6 heures. M2, ENSTA - ParisTech (David Filliat).  
 Master: Perception pour la robotique, 12 heures. M2 Systemes Avances et Robotique, University Pierre et Marie Curie (David Filliat)  
 Master: Perception pour la Robotique Développementale, 3 hours, CogMaster (David Filliat)  
 Licence Informatique, 64h Bordeaux University (Sébastien Forestier)  
 PY. Oudeyer taught a course on "Robotic modelling of cognitive development" at ENS Rennes, 12 h  
 PY. Oudeyer taught a course on "Robotic modelling of cognitive development" at Enseirb, 2 h  
 PY. Oudeyer taught a course on "Robotic modelling of cognitive development" at CogMaster, Paris, 3 h  
 PY. Oudeyer taught a course on "Developmental and cognitive robotics" at Univ. Mons, Belgium, 3h  
 PY. Oudeyer coordinated the project Poppy Education, which has developed several educational robotics kits for computer science education in high-schools  
 Continuing education: Robotics for education, 30 h, EPFL (Didier Roy)

### 10.2.2. Supervision

PhD in progress: Sébastien Forestier, Models of curiosity-driven learning of tool use and speech development, started in sept. 2015 (superv. P-Y. Oudeyer)  
 PhD in progress: William Schueller, Study of the impact of active learning and teaching in naming games dynamics, started in sept. 2015 (superv. P-Y. Oudeyer)  
 PhD in progress: Alvaro Ovalle-Castaneda, Computational models of intrinsically motivated learning and exploration, started in oct. 2016 (superv. P-Y. Oudeyer)  
 PhD in progress: Thibault Desprez, Design and study of the impact of educational robotic kits in computer science education, started in dec. 2016 (superv. P-Y. Oudeyer)

PY. Oudeyer supervised three master thesis internship: Thibault Desprez (M2, educational robotics), Marie Demangeat (M2, educational robotics), Sébastien Mick (M2, design and study of robotic prosthesis)

PY. Oudeyer supervised a team of computer and pedagogical engineers and researchers for the project Poppy Education (Didier Roy, Stéphanie Noirpoudre, Théo Segonds, Damien Caselli, Nicolas Rabault, Matthieu Lapeure)

PhD in progress: Thomas Hecht, Bio-inspired sensor fusion, started November 2013 (superv. Alexander Gepperth).

PhD : Egor Sattarov, Multimodal vehicle perception architecture, Université Paris-Saclay, 9/12/2016 (co-superv. Alexander Gepperth).

PhD : Thomas Kopinski, Machine Learning for human-machine interaction, Université Paris-Saclay, ENSTA ParisTech, 12/02/2016 (superv. Alexander Gepperth).

PhD in progress: Benjamin Clement, Intelligent Tutoring Systems, started oct 2015 (superv. Manuel Lopes and Pierre-Yves Oudeyer).

PhD in progress: Thibaut Munzer, Learning from Instruction, started oct 2013 (superv. Manuel Lopes).

PhD in progress: Baptiste Busch, Interactive Learning, started oct 2014 (superv. Manuel Lopes).

PhD in progress: Alexandra Delmas, Auto-Apprentissage Auto-Adaptable pour la compliance au traitement, started oct 2014 (superv. Manuel Lopes).

PhD : Alexandre Armand, Situation Understanding and Risk Assessment Framework for Preventive Driver Assistance, Université Paris-Saclay, ENSTA ParisTech, 31/05/2016, superv. David Filliat, Javier Ibanez-Guzmann

PhD in progress: Yuxin Chen, Interactive learning of objects and names on a humanoid robot, started oct. 2013 (superv. David Filliat).

PhD in progress: Celine Craye, Curiosity and visual attention for the guidance of an exploration robot, started apr. 2014 (superv. David Filliat).

PhD in progress: Adrien Matricon : Task dependent visual feature selection for optimising and generalizing robotics skills (superv. David Filliat, Pierre-Yves Oudeyer).

PhD in progress: José Magno Mendes Filho, Planning and control of an autonomous AGV in environment shared with humans, started Oct. 2015 (superv. David Filliat and Eric Lucet (CEA))

PhD in progress: Joris Guery, Domain adaptation for visual object recognition, started Oct. 2014 (superv. David Filliat and Bertrand Le Saulx (ONERA))

HdR :Alexander Gepperth, New learning paradigms for real-world environment perception, université Pierre et Marie Curie, 27/6/2016

### 10.2.3. Juries

Manuel Lopes was in the jury of Ben-Manson Toussaint (2016), Modeling Perceptual-Gestural Knowledge for Intelligent Tutoring Systems, supervised by Vanda Luengo, University of Grenoble, France

David Filliat was in the jury of Isabelle Leang (15/12/2016, Rapporteur) : Fusion en ligne d'algorithmes de suivi visuel d'objet

David Filliat was in the jury of Egor Sattarov (09/12/2016, Examineur) : Etude et quantification de la contribution des systèmes de perception multimodale assistés par des informations de contexte pour la détection et le suivi d'objets dynamiques

Alexander Gepperth was in the jury of Egor Sattarov (09/12/2016, Examineur) : Etude et quantification de la contribution des systèmes de perception multimodale assistés par des informations de contexte pour la détection et le suivi d'objets dynamiques



Alexander Gepperth was in the jury of Thomas Kopinski (12/2/2016, Examineur) : Machine learning method for human-machine interaction

David Filliat was in the jury of Fabrice Mayran de Chamiso (18/11/2016, Examineur) : Navigation exploratoire au long de la vie une approche intégrant planification, navigation, cartographie et localisation pour des robots mobiles disposant de ressources finies

David Filliat was in the jury of Chunlei Yu (15/09/2016, Examineur) : Contribution to evidential models for perception grids Application to intelligent vehicle navigation

David Filliat was in the jury of Hendry Ferreira Chame (10/01/2016, Rapporteur) : Egocentric Representations for Autonomous Navigation of Humanoid Robots

PY. Oudeyer was a member of the PhD juries of Maxime Carrere (Combiner les apprentissages motivés et associatifs, Univ. Bordeaux), Remi Fresnoy (Modélisation de l'activité gestuelle et sélection automatique de feedback pour des environnements interactifs d'apprentissage : application à la calligraphie, UTC Compiègne), Raphaël Rose-Andrieux (Modèle probabiliste hiérarchique de la locomotion bipède).

PY. Oudeyer was a member of the HdR of Alexander Gepperth, "New learning paradigms for real-world environment perception", Ensta ParisTech, Paris.

PY. Oudeyer was a member of the jury for selecting ENS Rennes (France) PhD grants.

## 10.3. Popularization

### 10.3.1. Poppy Education

#### 10.3.1.1. Events participation

January 2016, Observation Sequence for students from middle-school (Inria Bordeaux Sud-Ouest): S. Noirpoudre, T. Desprez, M. Demangeat, T. Laine) - We welcomed 5 students from middle-school (14 years old) during a week to discover the working environment and to introduce them to robotics

January 2016, Robot makers'day (Talence): S. Noirpoudre, D. Caselli, T. Desprez - Exhibition stand to show the projet Poppy Education and Poppy robots

January 2016, Training day at Espe de Bordeaux (Ecole supérieure du professorat et de l'éducation): D. Roy, S. Noirpoudre, T. Desprez, M. Demangeat) - Train a group of teachers initiate in programmation with the language visual Snap! and to robotics with Poppy Ergo Jr)

January 2016, Robots day (Multimedia library of Talence): P. Rouanet, T. Segonds - Programming workshop with Poppy torso robot

January 2016, Robots day (Multimedia library of Talence): P. Rouanet - A talk to present the platform robotics Poppy through science, art and education.

January 2016, Symposium Didactic-Didapro (Namur): D. Roy - Talk to present Poppy Education

January 2016, Eidos 2016 event (Dax): S. Noirpoudre - A talk to present Poppy Education

March 2016, Education exhibition Educatice-Educatec (Paris) : S. Noirpoudre, D. Roy - Exhibition stand to present the robotics plateforme Poppy and the use in Education (Poppy Education)

March 2016, Training day at Espe de Bordeaux (Ecole supérieure du professorat et de l'éducation): T. Desprez - Train a group of teachers in Snap!

March 2016, SNCEEL (organisation professionnelle de chefs d'établissement d'enseignement libre), Journées Collèges event (Paris), T. Desprez - Talk to present Poppy project and the pedagogical activities

April 2016, Connect thouars event (Talence): T. Desprez, S. Noirpoudre, M. Demangeat - Exhibition stand to present the project Poppy Education and workshop animation for kids (programming of Ergo in Snap!)

April 2016, Rob'o d'Evian: D. Roy (Evian) - Talk to present Poppy Education

May 2016, Robotics and Education days (ENS Lyon): D. Roy, S. Noirpoudre - Talk to present Poppy project and the pedagogical activities

May 2016, Bordeaux Geek Festival (Bordeaux): M. Demangeat, T. Desprez - Exhibition stand to show/present the robotics platform Poppy

May 2016, Forum des Nouvelles Initiatives de Médiation Scientifique (Bordeaux): D. Roy - Talk to present the project Poppy Education

May 2016, Forum des Nouvelles Initiatives de Médiation Scientifique (Bordeaux): T. Desprez, S. Noirpoudre - Exhibition stand to present the project Poppy Education and show the robots (real demonstrations) and pedagogical activities

May 2016, Visit of teachers of Espe Aquitaine (Inria - Bordeaux Surd-Ouest): S. Noirpoudre, D. Roy - Visit of the research center and presentation of Poppy Education project and to the robotic kits (25 teachers)

June 2016, Symposium Education and Robotics (Talence): D. Roy, T. Desprez - Talk to present Poppy Education project (purpose, pedagogical activities and the results)

June 2016, Symposium Education and Robotics (Talence): S. Noirpoudre - Exhibition stand to show Poppy Education project (demonstrations)

August 2016, Université d'été Ludovia (Ax-les-Thermes): P. Rouanet, M. Demangeat - Exhibition stand Poppy Education during 3 days in partnership with l'Académie de Bordeaux

August 2016, Université d'été Ludovia (Ax-les-Thermes): D. Roy, P. Rouanet, M. Demangeat - Workshop / presentation / demonstration of Poppy Education as part of the ExplorCamps.

October 2016, Coding Pi Science Day (CERN close to Geneva): S. Noirpoudre, T. Segonds - Conference to present the pedagogical robotic kit Poppy Ergo Jr

October 2016, Coding Pi Science Day (CERN close to Geneva): S. Noirpoudre, T. Segonds - Robotics workshop, one day to build and program a robot (30 participants)

October 2016, Fête de la science (Inria Bordeaux Sud-Ouest): S. Noirpoudre - 8 programming workshop in 2 days (with middle school students) using Snap! and the robot Poppy Ergo Jr

November 2016, Erasmus project "ICT WORLD : Imaging, Coding, Transforming and Modeling the World" (Inria Bordeaux Sud-Ouest): S. Noirpoudre, programming workshop using Snap! and the robot Poppy Ergo Jr (35 students and 14 teachers)

Novembre 2016, Inria Learning Lab (Paris): D. Roy - Presentation of Poppy Education

December 2016, Observation Sequence for Grade 3 Students (Inria Bordeaux Sud-Ouest): S. Noirpoudre, T. Desprez - We welcomed 2 students from middle-school during a week to discover the working environment and to introduce them to robotics

#### 10.3.1.2. Training and meeting

- January 2016, Meeting with teachers partners of the Poppy Education: Poppy Education project team - Talking about pedagogical activities and robots availabilities
- March 2016, Meeting with teachers partners of Poppy Education, Poppy Education project Team - Feedback and presentations on pedagogical activities and the use of robots in the classroom
- May 2016, Meeting with teachers partners of Poppy Education, Poppy Education project team - Feedback on pedagogical activities and the use of robots in the classroom
- May 2016, Train Inria workers (from scientific mediation), S. Noirpoudre - Learn how to present the Poppy project
- June 2016, Train Canope 33 workers, S. Noirpoudre - Programming the robot Ergo Jr using Snap!
- October 2016, Meeting with teachers partners of the Poppy Education project: Poppy Education project team - Presentation of the progress of the year and presentations of pedagogical activities

- November 2016, Train new teachers partners of Poppy Education: S. Noirpoudre - Building and programming the robot Poppy Ergo Jr

### 10.3.2. Inirobot

#### 10.3.2.1. Events participation

January 2016, Training day at Espe de Bordeaux (Ecole supérieure du professorat et de l'éducation): D. Roy, S. Noirpoudre, T. Desprez, M. Demangeat) - Train a group of teachers initiate in programming with the Inirobot kit.

January 2016, Symposium Didastic-Didapro (Namur): D. Roy - Talk to present Inirobot kit.

March 2016, Education exhibition Educative-Educatec (Paris) : S. Noirpoudre, D. Roy - Exhibition stand to present the robotics kit Inirobot.

March 2016, SNCEEL (organisation professionnelle de chefs d'établissement d'enseignement libre), Journées Collèges event (Paris), T. Desprez - Talk to present Inirobot kit.

April 2016, Rob'o d'Evian: D. Roy (Evian) - Talk to present Inirobot kit.

May 2016, Robotics and Education days (ENS Lyon): D. Roy, S. Noirpoudre - Talk to present Inirobot kit.

May 2016, Forum des Nouvelles Initiatives de Médiation Scientifique (Bordeaux): D. Roy - Talk to present inirobot kit.

June 2016, Symposium Education and Robotics (Talence): D. Roy - Talk to present Inirobot kit.

August 2016, Université d'été Ludovia (Ax-les-Thermes): P. Rouanet, M. Demangeat - Exhibition stand Inirobot during 3 days in partnership with l'Académie de Bordeaux

August 2016, Université d'été Ludovia (Ax-les-Thermes): D. Roy, P. Rouanet - Workshop / presentation / demonstration of Inirobot kit as part of the ExplorCamps.

August 2016, Université d'été Ludovia (Ax-les-Thermes): D. Roy wins Ludovia Prize. <http://ludovia.org/2016/coups-de-coeur-de-ludovia/>

September 2016, Colloque sur les contenus périscolaires (Artigues-près-Bordeaux): D. Roy - inirobot (organized by Senator Françoise Cartron)

October 2016, Journées APMEP (Lyon): J. Rivet, G. Lassus, members of Poppy Education teachers team - workshops on Inirobot and Poppy Education, organized by D. Roy

October 2016, Journées APMEP (Lyon): D. Roy wins Hoquenghem Prize. <https://www.inria.fr/centre/bordeaux/actualites/didier-roy-recoit-le-prix-serge-hocquenghem>

Novembre 2016, Inria Learning Lab (Paris): D. Roy - Presentation of Inirobot kit.

#### 10.3.2.2. Training and meeting

- Février 2016, French Senat (Paris), audition by Senator Françoise Cartron for educational activities : D. Roy - presentation / demonstration of Inirobot kit .
- October 2016, Robotics for education Training week "Graines de sciences": D. Roy (Fondation "La Main à la Pâte", Marseille CIRM)

### 10.3.3. KidBreath

February 11th 2016, 2nd Meeting for Aquitaine and Euskadi companies in Biology and Health: A. Delmas - Poster presentation of KidBreath project.

September 16th to 18th 2016, Hackathon of innovation in pulmonary diseases Respirhacktion: A. Delmas - Oral presentation and project development in hackathon.

October 5th to 7th 2016, 5th Conference in Health Ergonomics and Patient Safety: A. Delmas - Poster presentation of KidBreath project [102],

November 16th 2016, Learning Lab day: A. Delmas, B. Clément, P-Y. Oudeyer, D. Roy - Oral presentation of Flowers projects linked to Education.

December 2nd to 3rd 2016, 5th edition of Serious Games in Medicine Conference: A. Delmas - Oral presentation of KidBreath project

#### **10.3.4. Other**

PY Oudeyer wrote popular science articles about computer science, artificial intelligence and robotics, and gave several interviews in the general press and at radio and TV programs: see <http://www.pyoudeyer.com/popular-science/> and <http://www.pyoudeyer.com/press/> and has been maintaining a youtube channel showing popular science videos [https://www.youtube.com/channel/UC7QuDF8AaE6mqEM9W\\_S30RA/featured](https://www.youtube.com/channel/UC7QuDF8AaE6mqEM9W_S30RA/featured)

D. Roy is co-organiser of R2T2 International Mission with EPFL and ESPE Martinique: Remote Robotics programming with children. <https://www.thymio.org/en:thymio-r2t2>

## HEPHAISTOS Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. General Chair, Scientific Chair

- J-P. Merlet was General Chair of ARK 2016, organized by the team in Grasse (70 attendees), [16]

#### 10.1.1.2. Member of the Organizing Committees

- J-P. Merlet is a member of the scientific committee of the European Conference on Mechanism Science (EUCOMES), chairman of the scientific Committee of the Computational Kinematics workshop, a member of the steering Committee of IROS
- Y. Papegay is a permanent member of the International Steering Committee of the International Mathematica Symposium conferences series.

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Reviewer

- J-P. Merlet has been reviewing Editor for IROS 2016.
- The members of the team reviewed numerous papers for numerous international conferences.

### 10.1.3. Journal

#### 10.1.3.1. Member of the Editorial Boards

- J-P. Merlet is board member of the Journal of Behavioral Robotics

### 10.1.4. Invited Talks

- J-P. Merlet has given a talk during the Scientific days of Inria and the Human Robot Interaction workshop

### 10.1.5. Leadership within the Scientific Community

- J-P. Merlet is Inria representative to the PPP Eurobotics aisbl. He is a member of the IFToMM (International Federation for the Promotion of Mechanism and Machine Science) Technical Committees on History and on Computational Kinematics and has been re-elected as one of the 10 members of IFToMM Executive Council, the board of this federation. He is a member of the scientific committee of the CNRS GDR robotique.

### 10.1.6. Scientific Expertise

- J-P. Merlet was involved in project evaluations for several foreign funding agencies (Israel, Austria, Finland). He was also appointed as *Nominator* for the Japan's Prize. He was a member of the jury of the PhD Award of GDR robotique.

### 10.1.7. Research Administration

- J-P. Merlet is an elected member of Inria Scientific Council. and member of the CAC of UCA COMUE.
- O. Pourtallier is a board member of SeaTech, an Engineering School of University of Toulon. She is a member of the Inria CSD (doctoral students monitoring), and is responsible of the Inria NICE committee (long term invited scientists and post-doctoral student selection).
- Y. Papegay is a member of the Inria CUMIR and of the ADT committee

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

Master: J-P. Merlet lectured 8 hours on robotics and connected objects to Master NeuroMoteur (M2) at University Paris Est. He has participated to the Parallel Kinematic Machine summer school organized by LIRMM (6h)

Master : O. Pourtallier lectured 6 hours on game theory to Master OSE (M2), at École des Mines de Paris, Sophia Antipolis, France.

#### E-learning

Mooc ICN : J-P. Merlet and Y. Papegay have contributed to this MOOC which is intended to introduce the numerical world to teachers.

### 10.2.2. Supervision

- PhD in Progress : A. Massein, Design of Smart Environment for Human Behaviour Recognition, 2013-2016, supervisors: D.Daney, Y. Papegay

### 10.2.3. Juries

- J-P. Merlet has been a member of 5 PhD and 3 HDR juries, and for 6 of them has been the president of the jury.

## 10.3. Popularization

- J-P. Merlet has participated to a meeting “Future of robotics” organized by the Académie of Sciences. As a member of Executive Council of IFToMM he has contributed to the organization of the third Students International Olympiad on Mechanism and Machine Science held in Madrid. He is also a regular reviewer for Interstices and a contributor [18]
- Y.Papegay is actively participating to the Math.en.Jeans initiative for Mathematics teaching for undergraduate students. He has organized and animated summer schools in experimental mathematics and computer sciences. A three weeks session has been held at the University of Western Australia in Perth in July and three other one week sessions have been held in Oxford in June and August gathering around 50 high-school students - most of them were awardees in Mathematics Olympiads.

## LAGADIC Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organization

#### 10.1.1.1. General Chair, Scientific Chair

- Marie Babel was the Scientific Chair of the workshop "Innovation Robotique et Santé : Assistance à la conduite de fauteuil roulant" organized in Inria Rennes on December 2016 (150 participants).

#### 10.1.1.2. Member of the Organizing Committees

- François Chaumette was in charge of organizing a Tutorial on Vision for Robotics at ICRA'2016: <http://www.icra2016.org/conference/tutorials>. The plenary speakers were Peter Corke (QUT, Australia), Jana Kosecka (George Mason University, US), Eric Marchand [45] and François Chaumette [44]. Around 200 participants attended this tutorial.
- Patrick Rives was in charge of co-organizing the "Journée Transports Intelligents " on behalf of the RFIA'2016 conference in Clermont-Ferrand: <http://rfia2016.iut-auvergne.com/index.php/rfp-ia>
- Paolo Robuffo Giordano has co-organized the Invited Session "Rigidity Theory for Problems in Multi-Agent Coordination" at the 54<sup>th</sup> IEEE Conf. on Decision and Control (CDC 2015), together by D. Zelazo (Technion, Israel) and A. Franchi (LAAS, France).

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Chair of Conference Program Committees

- Paolo Robuffo Giordano: Workshop/Tutorial Session Chair for IROS 2016, Daejeon, Korea

#### 10.1.2.2. Member of the Conference Program Committees

- François Chaumette: ICRA'2016
- Eric Marchand: ICRA 2016
- Patrick Rives: ICRA'2016, CVPR'2016
- Paolo Robuffo Giordano: ICRA'2016

#### 10.1.2.3. Reviewer

- Marie Babel: IROS'2016 (2), ICIP'2016 (4)
- François Chaumette: IROS'2016 (1), ICRA'2017 (1)
- Vincent Drevelle: IFAC 2017 World Congress (1).
- Alexandre Krupa: IROS'2016 (1), ICRA'2017 (1)
- Eric Marchand: IROS 2016, ICRA 2017 (1), RFIA 2016 (2)
- Julien Pettré: SIGGRAPH 2016 (3), Collective Dynamics (1), CASA 2016 (3), IROS 2016 (3), ALIFE 2016 (2), ACM SCA 2016 (1), ACM CIE (1), TVCG (1), SIGGRAPH ASIA 2016 (1), Elsevier CAG (1), Pacific Graphics 2016 (1), Plos ONE (1), ACM MIG 2016 (2), IEEE VR 2017 (1), IEEE TBME (1), Taylor and Francis JMB (1), Eurographics 2017 (4), Elsevier TRB (1).
- Patrick Rives: ICRA'2016, ITSC'2016, CVPR'2016, ECCV'2016, IV'2016, ICINCO'2016, RFIA'2016, ICRA'2017
- Paolo Robuffo Giordano: ACC'2017 (1), DARS'2016 (2), ICRA'2017(2), IROS'2016 (3), RSS'2016 (1)

### 10.1.3. Journal

#### 10.1.3.1. Member of the Editorial Boards

- François Chaumette: Editorial Board of the Int. Journal of Robotics Research, Senior Editor of the IEEE Robotics and Automation Letters, Editorial Board of the Springer Tracts in Advanced Robotics, Board Member of the Springer Encyclopedia of Robotics.
- Alexandre Krupa: Associate Editor of the IEEE Robotics and Automation Letters
- Eric Marchand: Associate Editor of the IEEE Robotics and Automation Letters
- Julien Pettré: Associate Editor for Computer Animation and Virtual Worlds, Associate Editor for Collective Dynamics
- Paolo Robuffo Giordano: Associate Editor of the IEEE Transactions on Robotics

#### 10.1.3.2. Reviewer - Reviewing Activities

- Marie Babel: IEEE Trans. on Human-Machine Systems (1)
- François Chaumette: IEEE Trans. on Robotics (2), IEEE/ASME Trans. on Mechatronics (1), Robotics and Autonomous Systems (1), Journal of Intelligent and Robotic Systems (1), Control Engineering Practice (1)
- Vincent Drevelle: Transportation Research Part C (1)
- Eric Marchand : Int. Journal of robotics Research (1), Software, Practice and Experience (1), IEEE Trans. on Visualization and Computer Graphics (1), Visual Computer (1)
- Patrick Rives: IEEE Robotics and Automation Letters (1), Robotics and Autonomous Systems (1)
- Paolo Robuffo Giordano: IEEE Robotics and Automation letters (2), IEEE Trans. on Control of Network Systems (1), IEEE Trans. on Haptics (1)

#### 10.1.4. Invited Talks

- François Chaumette: Plenary talk at RCAR'2016, Angkor Wat, Cambodia [43].
- Paolo Robuffo Giordano. Invited Talk: Collective Control, State Estimation and Human Interaction for Quadrotors in Unstructured Environments. 2016 GIS Micro-Drones Day, ENAC, Toulouse, France, October 2016
- Paolo Robuffo Giordano. Invited Seminar: Estimation and Control for Multi-Robot Systems. 2016 IEEE RAS Summer School on Multi-Robot Systems, Singapore, June 2016

#### 10.1.5. Leadership within the Scientific Community

- François Chaumette is a 2016-2019 elected member of the Administrative Committee of the IEEE Robotics and Automation Society. He is also a member of the Scientific Council of the CNRS INS2I.
- François Chaumette and Patrick Rives are members of the scientific council of the “GdR Robotique”.

#### 10.1.6. Scientific Expertise

- François Chaumette is vice-president of the ANR Tremplin-ERC program (in charge of providing grants to recipients of non-funded A and B Starting and Consolidator ERC proposals). He was also a member of the “Institut Universitaire de France (IUF)” selection committee in charge of evaluating senior proposals, and served in the jury to select an Irstea senior researcher (DR2).
- Julien Pettré is project proposal reviewer for the Netherlands Organisation for Scientific Research.
- Paolo Robuffo Giordano is a reviewer for EU FP7 projects, for the ANR (French National Research Agency) ASTRID 2016 Program, for the “Comité ECOS Nord” of the “Ministère des affaires étrangères et du développement international” and the “Ministère de l’Enseignement supérieur et de la Recherche”, and for the DGA as expert on algorithms and sensors for drones.



### 10.1.7. Research Administration

- François Chaumette serves as the president of the committee in charge of all the temporary recruitments (“Commission Personnel”) at Inria Rennes-Bretagne Atlantique and Irisa. He is also a member of the Head team of Inria Rennes-Bretagne Atlantique.
- Alexandre Krupa and Julien Pettré are members of the CUMIR (“Commission des Utilisateurs des Moyens Informatiques pour la Recherche”) of Inria Rennes-Bretagne Atlantique.
- Eric Marchand served as secretary in the board of the “Association Française pour la Reconnaissance et l’Interprétation des Formes (AFRIF)”. He is also in charge of the Irisa Ph.D. students in the committee in charge of all the temporary recruitments (“Commission Personnel”) at Inria Rennes-Bretagne Atlantique and Irisa. He is in the board of the “Pôle Images et Réseaux” and in the board of “Ecole doctorale Matisse”.
- Julien Pettré is an elected member of the “Comité de Centre” at Inria Rennes-Bretagne Atlantique.
- Patrick Rives is a member of the “Comité des projets” and “Comité de Centre” at Inria Sophia Antipolis-Méditerranée.

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

Marie Babel:

Master INSA2: “Robotics”, 26 hours, M1, INSA Rennes

Master INSA1: “Architecture”, 30 hours, L3, INSA Rennes

Master INSA2: “Computer science project”, 30 hours, M1, INSA Rennes

Master INSA2: “Image analysis”, 18 hours, M1, INSA Rennes

Master INSA1: “Remedial math courses”, 50 hours, L3, INSA Rennes

François Chaumette:

Master ESIR3: “Visual servoing”, 8 hours, M2, Ecole supérieure d’ingénieurs de Rennes

Vincent Drevelle:

Master ESIR2: “Real-time systems and RTOS”, 24 hours, M1, Esir Rennes

Master GLA: “Terrain information systems”, 14 hours, M2, Université de Rennes 1

Master Info: “Artificial intelligence”, 12 hours, M1, Université de Rennes 1

Licence Info: “Computer systems architecture”, 20 hours, L1, Université de Rennes 1

Licence Miage: “Computer programming”, 78 hours, M1, Université de Rennes 1

Master CTS: “Instrumentation, localization, GPS”, 4 hours, M2, Université de Rennes 1

Licence and Master ET: “Electronics project”, 23 hours, L3 and M1, Université de Rennes 1

Alexandre Krupa:

Master SIBM (Signals and Images in Biology and Medicine): “Medical robotics guided from images”, 4.5 hours, M2, Université de Rennes 1, Brest and Angers

Master FIP TIC-Santé: “Ultrasound visual servoing”, 6 hours, M2, Télécom Physique Strasbourg

Master INSA3: “Modeling and engineering for Biology and Health applications”, 12 hours, M2, INSA Rennes

Master ESIR3: “Ultrasound visual servoing”, 9 hours, M2, Esir Rennes

Eric Marchand:

Master Esir2: “Colorimetry”, 24 hours, M1, Esir Rennes

Master Esir2: “Computer vision: geometry”, 24 hours, M1, Esir Rennes

Master Esir3: “Special effects”, 24 hours, M2, Esir Rennes

Master Esir3: “Computer vision: tracking and recognition”, 24 hours, M2, Esir Rennes

Master MRI: “Computer vision”, 24 hours, M2, Université de Rennes 1

Master MIA: “Augmented reality”, 4 hours, M2, Université de Rennes 1

Julien Pettré:

Licence Info : “Programmation Informatique”, 40, LI1, Université de Rennes 1, Rennes

INSA1: “Programmation Informatique”, 40 hours, INSA Rennes

### 10.2.2. Supervision

- Ph.D.: Le Cui, “Robust micro/nano-positioning by visual servoing”, defended on January 2016, supervised by Eric Marchand [15]
- Ph.D.: Vishnu Karakkat Narayanan, “Semi-autonomous navigation of a wheelchair by visual servoing and user intention analysis”, defended in November 2016, supervised by Marie Babel and Anne Spalanzani (Chroma group at Inria Rhône-Alpes) [16]
- Ph.D.: Nicolas Cazy, “Commande prédictive pour la réalisation de tâches d’asservissement visuel successives”, defended in November 2016, supervised by Paolo Robuffo Giordano, François Chaumette and Pierre-Brice Wieber (Bipop group at Inria Rhône-Alpes) [13]
- Ph.D.: Julien Bruneau, “Studying and modeling complex interactions for crowd simulation”, defended in November 2016, supervised by Julien Pettré and Anne-Hélène Olivier (Mimetic group at Inria Rennes-Bretagne Atlantique and Irisa) [12]
- Ph.D.: Aly Magassouba, “Aural servo: towards an alternative approach to sound localization for robot motion control”, defended in December 2016, supervised by François Chaumette and Nancy Bertin (Panama group at Inria Rennes-Bretagne Atlantique and Irisa)
- Ph.D.: Lucas Royer, “Real-time tracking of deformable targets in 3D ultrasound sequences”, defended in December 2016, supervised by Alexandre Krupa, Maud Marchal (Hybrid group at Inria Rennes-Bretagne Atlantique and Irisa) and Guillaume Dardenne (IRT b<>com)
- Ph.D.: Pierre Chatelain, “Quality-driven control of a robotized ultrasound probe”, defended in December 2016, supervised by Alexandre Krupa and Nassir Navab (Technische Universität München) [14]
- Ph.D.: Suman Raj Bista, “Indoor Navigation of Mobile Robots based on Visual Memory and Image-Based Visual Servoing”, defended in December 2016, supervised by Paolo Robuffo Giordano and François Chaumette [11]
- Ph.D. in progress: Renato José Martins, “Robust navigation and control of an autonomous vehicle”, started in November 2013, supervised by Patrick Rives and Samuel Siqueira Bueno (CTI)
- Ph.D. in progress: Jason Chevie, “Control of a flexible needle by visual servoing using B-mode ultrasound images”, started in September 2014, supervised by Alexandre Krupa and Marie Babel
- Ph.D. in progress: Quentin Bateux, “Visual servoing from global descriptors”, started in October 2014, supervised by Eric Marchand
- Ph.D. in progress: Fabrizio Schiano, “Collective control with onboard sensors for multiple quadrotor UAVs”, started in October 2014, supervised by Paolo Robuffo Giordano
- Ph.D. in progress: Pedro Patlan-Rosales, “Enhancement of ultrasound elastography by visual servoing and force control”, started in October 2014, supervised by Alexandre Krupa

- Ph.D. in progress: Noël Mériaux, “Landing by visual servoing”, started in October 2014, supervised by François Chaumette, Eric Marchand and Patrick Rives
- Ph.D. in progress: Lesley-Ann Duflot, “Visual servoing using shearlet transform”, started in November 2014, supervised by Alexandre Krupa and Brahim Tamadazte (Minarob group at FEMTO-ST, Besançon)
- Ph.D. in progress: Firas Abi Farraj, “Shared Control Architectures for Visual Servoing Tasks”, started in October 2015, supervised by Paolo Robuffo Giordano
- Ph.D. in progress: Salma Jiddi, “Analyses géométrique et photométrique pour des applications de réalité mixte”, started in October 2015, supervised by Eric Marchand and Philippe Robert (Technicolor)
- Ph.D. in progress: Ide Flore Kenmogne Fokam, “Cooperative localization in multi-robot fleets using interval analysis”, started in October 2015, supervised Vincent Drevelle and Eric Marchand
- Ph.D. in progress: Bryan Penin “Model predictive visual servoing for UAVS”, started in October 2015, supervised by Paolo Robuffo Giordano and François Chaumette
- Ph.D. in progress: Guillaume Cortes, “Motion Capture”, started in October 2015, supervised Eric Marchand and Anatole Lecuyer.
- Ph.D. in progress: Muhammad Usman, “Robust Vision-Based Navigation for Quadrotor UAVs”, started in October 2015, supervised by Paolo Robuffo Giordano
- Ph.D. in progress: Louise Devigne, “Contribution d’une aide technique robotique à l’évaluation de pathologies neurologiques : Application à la navigation d’un fauteuil roulant”, started in November 2015, supervised by Marie Babel and Philippe Gallien (Pôle Saint Hélier)
- Ph.D. in progress: Quentin Delamare, “Algorithmes d’estimation et de commande pour des quadrirotors en interaction physique avec l’environnement”, started in September 2016, supervised by Paolo Robuffo Giordano
- Ph.D. in progress: Axel Lopes, “Data assimilation for synthetic vision-based crowd simulation algorithms”, started in October 2016, supervised by Julien Pettré and François Chaumette
- Ph.D. in progress: Aline Baudry, “Contribution à la modélisation des fauteuils roulants pour l’amélioration de leur navigation en mode semi-autonome”, started in October 2016, supervised by Marie Babel and Sylvain Guégan (Mechanical Engineering Dpt/LGCGM at Insa Rennes)
- Ph.D. in progress: Hadrien Gurnel, “Shared control of a biopsy needle from haptic and ultrasound visual feedback”, started in October 2016, supervised by Alexandre Krupa and Maud Marchal (Hybrid group at Inria Rennes-Bretagne Atlantique and Irisa)
- Ph.D. in progress: Dayana Hassan, “Plate-forme robotisée d’assistance aux personnes à mobilité réduite”, started in November 2016, supervised by Paolo Salaris, Patrick Rives and Frank Anjeaux (Axyn robotique)
- Internship: Valentin Bureau from May 2016 until Sep 2016 (2 months in mobility in University College of London within ISI4NAVE associated team), M1/Second year of Computer Science department, INSA Rennes, supervised by Marie Babel
- Internship: Timothée Collard “Adapting a localization application to ROS and MAV navigation” from Jun 2016 until Aug 2016, M1, Université de Rennes 1, supervised by Vincent Drevelle
- Internship: Benjamin Fasquelle from May 2016 until Aug 2016, M1, ENS Rennes, supervised by Eric Marchand
- Benoit Heintz from Mar 2016 until Jul 2016, L2 level, ENSIL Limoges, supervised by Fabien Spindler and Giovanni Claudio
- Internship: Manutea Huang from Jun 2016 until Sep 2016, L3/First year of Computer Science department, INSA Rennes, supervised by Marie Babel
- Internship: Daniel Huc from May 2016 until Sep 2016, M2, IM2AG Grenoble, supervised by Julien Pettré

- Internship: Valentin Limantour from Sep 2016 until December 2016, M1, ENIB Brest, supervised by Paolo Robuffo Giordano
- Internship: Etienne Moisson from May 2016 until Jun 2016, M, Univ. Rennes 1, supervised by Julien Pettré

### 10.2.3. External Ph.D. and HdR Juries

- François Chaumette: Julien Bruneau (Ph.D., president, Inria Rennes), Andrea Cherubini (HdR, president, Lirmm, Montpellier)
- Alexandre Krupa: Laure-Anais Chanel (Ph.D., reviewer, ICube, Strasbourg), Mouloud Ourak (Ph.D., reviewer, FEMTO-ST, Besançon), Paul Mignon (Ph.D., reviewer, TIMC-IMAG, Grenoble)
- Eric Marchand: Vishnu Karakkat Narayanan (Ph.D., president, Inria Rennes), Suman Raj Bista (Ph.D., president, Inria Rennes), Limming Yang (Ph.D., reviewer, EC Nantes), Tu-Hoa Pham (Ph.D., reviewer, Lirmm, Montpellier).
- Julien Pettré: Christian Vassallo (Ph.D., Laas, Toulouse), Fabien Cissé (Ph.D., UPMC, Paris), Thomas Pitiot (Ph.D., ICube, Strasbourg)
- Patrick Rives: Zui Tao (Ph.D., president, UTC, Compiègne), Bruno Ricaud (Ph.D., reviewer, Ecole des Mines, Paris), Victor Gibert (Ph.D., member, IRCCyN, Nantes), Yue Kang (Ph.D., reviewer, UTC, Compiègne), Abdelhamid Dine (Ph.D., president, ENS-Cachan, Paris-Saclay), Pierre Merriault (Ph.D., reviewer, Esigelec, Rouen), Fabrice Mayran de Chamiso (Ph.D., member, CEA-LIST, Paris-Saclay), Bruno Vallet (HdR, member, IGN, Paris).
- Paolo Robuffo Giordano: Osamah Saif (Ph.D., UTC, Compiègne, France), Marco Aggravi (Ph.D., University of Siena, Italy), Leonardo Meli (Ph.D., University of Siena, Italy).

## 10.3. Popularization

- Due to the visibility of our experimental platforms, the team is often requested to present its research activities to students, researchers or industry. Our panel of demonstrations allows us to highlight recent results concerning the positioning of an ultrasound probe by visual servoing, grasping and dual arm manipulation by Romeo, vision-based shared control using our haptic device for object manipulation, the control of a fleet of quadrotors, vision-based detection and tracking for space navigation in a rendezvous context, the semi-autonomous navigation of a wheelchair, and augmented reality applications. Some of these demonstrations are available as videos on VispTeam YouTube channel (<https://www.youtube.com/user/VispTeam/videos>). This year there were among others, demonstrations organized for the HCERES expert committee that evaluated IRISA, about twenty people affiliated to the CNRS electronics network, students of the “Innovation et entrepreneuriat” Master, those of the L3 R&I at ENS Rennes, about twenty students from the “Ecole des Mines de Nancy”, several classes of high school students around Rennes, without forgetting the members of the Ph.D. thesis juries.
- Fabien Spindler and Giovanni Claudio were interviewed by TV Rennes about Pepper robot (<https://www.facebook.com/166100743494694/videos/vb.166100743494694/959489554155805/?type=2&theater>).
- Marie Babel participated to “15<sup>e</sup> Journée nationale des pôles de compétitivité” in March 2016 (Paris): HandiViz project was selected by the French Ministry of Finance
- Marie Babel participated to the Science Festival in October 2016 with an interview at “Village des Sciences” and a workshop for general public organized in Acigné near Rennes.
- Marie Babel participated to the “Convention Nationale des SATT” (October 2016, Paris).
- Marie Babel gave a talk on "HandiViz: a new driving experience" in October 2016, during the “Semaine des Technologies - Robotique et santé” organized at Insa Rennes.

- Vincent Drevelle participated to the “Journée science et musique” in Rennes, with an interactive demonstration of sound-based tracking of a micro aerial vehicle with a beam projector (in cooperation with the Panama team).
- An article related to the research activity of Alexandre Krupa on robotic needle steering entitled “Un robot qui apprend à viser” has been published in March 2016 in the general-audience magazine “Sciences Ouest”: <http://www.espace-sciences.org/sciences-ouest/340/dossier/un-robot-qui-apprend-a-viser>.
- Paolo Robuffo Giordano has given press releases on the activities involving formation control for multiple quadrotor UAVs to Émergences Inria, Sciences Ouest, and “Industrie & Technologies”.

## LARSEN Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Scientific Events Organisation

#### 9.1.1.1. Member of the Organizing Committees

- Amine Boumaza co-organized “Projections, Interactions, Emotions - Journées PsyPhINe 2016”, the second workshop of the PsyPhINe project (<http://poincare.univ-lorraine.fr/fr/manifestations/psyphine-2016>).
- François Charpillat co-organized and co-chaired the Workshop on On-line decision-making in multi-robot coordination, June 19, 2016, Ann Arbor, Michigan, USA, organized in conjunction of the 2016 Robotics: Science and Systems Conference (RSS 2016).
- Serena Ivaldi co-organized the Workshop “Human-Robot collaboration: towards co-adaptive learning though semi-autonomy and shared control” at IROS 2016 (<http://www.ausy.tu-darmstadt.de/Workshops/IROS2016>).

### 9.1.2. Scientific Events Selection

#### 9.1.2.1. Member of the Conference Program Committees

- Amine Boumaza was a PC member of GECCO’2016 (Genetic and Evolutionary Computation Conference), ALIFE’2016 (International Conference on the Synthesis and Simulation of Living Systems), CEC’2016 (Congress on Evolutionary computation).
- Francis Colas was a Technical PC member for the EAI International Conference Track on Smart Cities and the Future Internet (SCiFI).
- Serena Ivaldi was an Associate Editor for the 2016 IEEE/RAS International Conference on Robotics and Automation (ICRA), the 2016 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), the 2016 IEEE/RAS International Conference on Humanoid Robots (HUMANOIDS), the 2016 IEEE International Conference on Development and Learning (ICDL).
- Jean-Baptiste Mouret was a PC member of GECCO’2016 (Genetic and Evolutionary Computation Conference), ALIFE’2016 (International Conference on the Synthesis and Simulation of Living Systems), EVO\*2016 (EvoStar), SAB’2016 (Conference on System and Adaptive Behaviors – from animals to animats).
- Vincent Thomas was a member of the program committee for “Journées Francophones sur la Planification la Décision et l’Apprentissage pour la conduite de systèmes 2016” (JFPDA 2016).

#### 9.1.2.2. Reviewer

- François Charpillat was a reviewer for the 2016 IEEE International Conference on Robotics and Automation (ICRA), The 2016 european conference on artificial intelligence (ECAI), Rob&IA2016, RFP-IA 2016, WACAI2016, DEMUR, and the 2016 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).
- Francis Colas was a reviewer for the 2016 IEEE International Conference on Robotics and Automation (ICRA), the EAI International Conference on Smart Cities and the Future Internet (SCiFI), and the 2016 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).
- Serena Ivaldi was a reviewer for the ACM International Conference on Human-Robot Interaction (HRI), the IEEE International Conference on Human-Robot Communication (RO-MAN), the International Conference Robotics: Science and Systems (RSS).

- Jean-Baptiste Mouret was a reviewer for the 2016 IEEE International Conference on Robotics and Automation (ICRA), and the 2016 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).
- Vincent Thomas was a reviewer for “Journées Francophones sur la Planification la Décision et l’Apprentissage pour la conduite de systèmes 2016” (JFPDA 2016).

### 9.1.3. Journal

#### 9.1.3.1. Member of the Editorial Boards

- Serena Ivaldi is an editorial board member for the Journal "Intelligent Service Robotics", Springer. She was also Guest Editor for Springer Autonomous Robots for the Special Issue “Whole-body control of contacts and dynamics for humanoid robots”.

#### 9.1.3.2. Reviewer - Reviewing Activities

- Amine Boumaza is a Review Editor for Frontiers in AI and Robotics.
- Francis Colas was a reviewer for the Journal of Field Robotics, and the IEEE Transactions on Automation Science and Engineering.
- Serena Ivaldi was a Review Editor and reviewer for Frontiers in AI and Robotics, and a reviewer for IEEE Transactions on Cognitive and Developmental Systems.
- Jean-Baptiste Mouret is Review Editor for Frontiers in AI and Robotics. He was a reviewer for Nature Communications, Frontiers in Neurobotics, Artificial Life.
- Vincent Thomas was a reviewer for the IEEE Transactions on Cybernetics.

### 9.1.4. Invited Talks

- Jean-Baptiste Mouret was invited to talk at:
  - The Origins Workshop (Arizona State University, USA),
  - The cross-disciplinary symposium on Machine Learning and Architecture (Copenhagen, Denmark),
  - 9th SIG on Design Theory of the International Design Society (Keynote, Paris, France),
  - Journée des Jeunes Chercheuses et Chercheurs organisée de l’ANR (Paris, France),
  - Ministère des finances (Conseil Général de l’Economie / mission de réflexion sur les armes autonomes, Paris, France),
  - Journée “Apprentissage et IA” organized by CERNA (Commission de réflexion sur l’Éthique de la Recherche en sciences et technologies du Numérique d’Allistene ),
  - Journée Scientifiques Inria (Rennes, France),
  - Journée Intelligence Artificielle et Voiture Autonomes (Institut VEDECOM, Versailles, France),
  - HLR 2016 (German-French Winter School on Humanoids and Legged robots).
- Serena Ivaldi gave the following invited talks:
  - 06/2016: *Humanoid robotics and human-robot interaction*. Invited talk at Journée Robotique et IA, RFIA 2016, by Olivier Simonin.
  - 10/2016: *Grasping, vision and interaction for object manipulation with iCub*. Invited talk at IEEE-RAS IROS 2016 Workshop on Grasping and Manipulation, by Yasemin Bekiroglu.
  - 11/2016: *Exploiting tactile information for whole-body dynamics, learning and human-robot interaction*. Invited talk at IEEE-RAS Humanoids 2016 Workshop on Tactile Manipulation, by Qiang Li.
  - 11/2016: *Studying human behavior during human-robot collaborative tasks*. Invited talk at IEEE-RAS Humanoids 2016 Workshop on Human Movement Understanding, by Emel Demircan.
  - 11/2016: *Les robots humanoïdes: de l’acceptabilité à l’interaction*. Invited talk at the Forum de Sciences Cognitives, Nancy, by Christine Bourjot.
  - 12/2016: *Learning and interaction with iCub*. Invited talk at the German-French Conference on Humanoid and Legged Robots 2016, by Olivier Stasse.

### 9.1.5. Leadership within the Scientific Community

- Jean-Baptiste Mouret is the chair of the “evo-devo-robot” task force of the IEEE technical committee “Developmental and Cognitive Systems”.

### 9.1.6. Scientific Expertise

- Serena Ivaldi was appointed vice-president of the CES 33 panel Interaction and Robotics of the ANR. She was an invited member of the CNRS for the “Groupe de Discussion pour le renouvellement de la liste des candidats” section 07 CNRS (Specif Campus, GRETSI & Club EEA) - invited by Specif Campus, 2016.

### 9.1.7. Research Administration

- Amine Boumazza is a board member of the Évolution Artificielle association.
- Serena Ivaldi was member of the hiring committees:
  - CNRS: Committee member for jury n.29 - IR2 - BAP, sept.-oct. 2016.
  - Maître de conférence: Committee member for jury 27MCF1744 (4335) at UPMC, Paris, apr.-may 2016.
- Francis Colas was member of the hiring committee 27-MCF-0762 at ESSTIN, Université de Lorraine.

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

- Master: Karim Bouyarmane, “Programmation C/C++”, 20h eq. TD, M1/M2, ESSTIN, France.
- Master: Francis Colas, “Robotique Autonome”, 18h eq. TD, M2 “Systèmes Interactifs et Robotiques”, CentraleSupélec, France.
- Master: Francis Colas, “Introduction à ROS”, 6h eq. TD, M1, Mines de Nancy, France.
- Master: Serena Ivaldi, “Analyse du comportement”, 15h eq. TD, M2 “Science Cognitive”, Université de Lorraine, France.
- Master: Jean-Baptiste Mouret, “Disruptive technologies: Robotics”, 3h eq. TD, M2 (School of Public Affairs), Sciences Po Paris, France.
- Master: Vincent Thomas, “Modèles probabilistes et Apprentissage par renforcement”, 15h eq. TD, M2 “Informatique - Image Perception Raisonnement Cognition”, Univ. Lorraine, France.
- Master: Vincent Thomas, “Game Design”, 20h eq. TD, M1 “Sciences Cognitives”, Univ. Lorraine, France.
- Master: Vincent Thomas, “Agent intelligents et collectifs”, 20h eq. TD, M1 “Sciences Cognitives”, Univ. Lorraine, France.
- Master: Vincent Thomas, “Serious Game”, 12h eq. TD, M2 “Sciences Cognitives”, Univ. Lorraine, France.

### 9.2.2. Supervision

- PhD: Abdallah Dib, “Assistance à la personne en perte d'autonomie : étude de l'apport d'un robot compagnon”, 24 May 2016, François Charpillet (advisor).
- PhD in progress: Adrian Bourgaud, “Multi-sensor Fusion and Active Sensing”, started in Jul. 2015, François Charpillet (advisor).
- PhD in progress: Konstantinos Chatzilygeroudis, “Diagnosis-free Damage Recovery in Robotics with Machine Learning”, started in Oct. 2015, Jean-Baptiste Mouret (advisor).
- PhD in progress: Oriane Dermay, “Learning to control the physical interaction of a humanoid robot with humans”, started in Nov. 2015, François Charpillet (advisor), Serena Ivaldi.



- PhD in progress: Yassine El Khadiri, “Apprentissage automatique pour l’assistance à l’autonomie à domicile”, started in Nov. 2016, François Charpillet (advisor).
- PhD in progress: Iñaki Fernández Pérez, “*Apprentissage incrémental évolutif*”, started in Oct. 2013, F. Charpillet (advisor), Amine Boumaza.
- PhD in progress: Nassim Kaldé, “*Exploration et reconstruction d’un environnement inconnu par une flottille de robots*”, started in Oct. 2012, François Charpillet (advisor), Olivier Simonin.
- PhD in progress: Rituraj Kaushik, “Fast adaptation to damage by exploiting trajectory data”, started in Oct. 2016, Jean-Baptiste Mouret (advisor).
- PhD in progress: Van Quan Nguyen, “Mapping of a sound environment by a mobile robot”, started in Dec. 2014, Emmanuel Vincent (advisor), Francis Colas, François Charpillet.

### 9.2.3. Juries

- François Charpillet was reviewer and member of the PhD committee of :
  - Hendry Ferreira Chame, “Egocentric Representations for Autonomous Navigation of Humanoid Robots”, école centrale de Nantes, IRCCYN.
  - Patrick Béchon, “Planification multi-robot pour des missions de surveillance avec contraintes de communication”, Université de Toulouse, ISAE, LAAS, ONERA.
  - Raphael Lallemand, “Symbolic and Geometric Planning for teams of Robots and Humans”, Université de Toulouse, INSA Toulouse, LAAS.
  - Loïc Sevrin, “Mesure et suivi d’activité de plusieurs personnes dans un Living Lab en vue de l’extraction d’indicateurs de santé et de bien être”, Université de Claude Bernard Lyon 1, Institut des nanotechnologies de Lyon;
  - Vishnu Karakkat Narayanan, “Characterizing assistive shared control through vision-based and human-aware designs for wheelchair navigation assistance”, Université Bretagne Loire, INSA Rennes, Team Project Lagatic and Chroma.
  - Haïfa Rabai, “Réseau dynamique d’applications chaotiques couplées pour l’étude de la mobilité urbaine”, Université du Havre.
- François Charpillet was member and chair of the PhD committee of :
  - Coralie Angeletti, “Stratégie de Perception Active pour l’Interprétation de Scènes”, University Blaise Pascal, Clermont Ferrand.
  - Kevin Roussel, “Évaluation et amélioration des plates-formes logicielles pour réseaux de capteurs sans-fil, pour optimiser la qualité de service et l’énergie”, Université de Lorraine.
- François Charpillet was member of the Phd committee of :
  - Abdallah Dib, “Vers un système de capture du mouvement humain en 3D pour un robot mobile évoluant dans un environnement encombré”, Lorraine University.
  - Seifallah Ben Saad, “Conception d’un algorithme de coordination hybride de groupes de robots sous-marins communicants Application : acquisition optique systématique et détaillée des fonds marins”, Université de Bretagne occidentale, ENSTA Bretagne.

## 9.3. Popularization

- Amine Boumaza is a member of the editorial board of “Interstice”.
- Vincent Thomas gave proposed tutorials on “physics simulation” and “reinforcement learning” during “journées ISN-EPI” (24th of Mars 2016).
- Vincent Thomas participated in the preparation of “Computer Science Exporoute” (conducted by Inria Nancy Grand-Est) planned for 2017.
- Jean-Baptiste Mouret wrote an article for “Interstices” (“ Des robots qui s’adaptent aux dommages en seulement quelques minutes”).

- Jean-Baptiste Mouret helped Pierre Vandeginste (journalist) to write an article about his work in “La Recherche” (Dec. 2016); he also appeared in Science et Avenir, Arte Future Mag, Socialter, Telerama.
- Serena Ivaldi appeared in the following articles / gave the following interviews:
  - 07/2016: Humanité Dimanche, Homme/robot. Le trouble au rendez-vous. <http://www.humanite.fr/hommerobot-le-trouble-au-rendez-vous-612149>
  - 06/2016: Inriality, Robots humanoïdes : une inquiétante étrangeté. <http://www.inriality.fr/culture-loisirs/relations-homme-robot/robophobie/robots-humoïdes-une/>
  - 06/2016: Les Inrockuptibles, n.1070, Comment les robots ont conquis nos coeurs. <http://www.lesinrocks.com/2016/06/01/actualite/dossier-high-tech-androïdes-ont-conquis-coeurs-11832819/>
  - 03/2016: Interstices, Des robots au service de l’homme. [https://interstices.info/jcms/p\\_88305/des-robots-au-service-des-hommes](https://interstices.info/jcms/p_88305/des-robots-au-service-des-hommes)
  - 03/2016: La semaine, Têtes chercheuses. <http://www.lasemaine.fr/2016/03/17/tetes-chercheuses>
  - 03/2016: Pour la science, Quels obstacles à l’insertion des robots en société ? <https://pbs.twimg.com/media/CceuEH3W4AEoNx-.jpg:large>

## **PERSVASIVE INTERACTION Team**

### **9. Dissemination**

#### **9.1. Promoting Scientific Activities**

##### **9.1.1. General Chair, Scientific Chair**

- Sabine Coquillart has served as general co-chair for IEEE VR 2016, Greenville South Carolina.

##### **9.1.2. Member of the Conference Program Committees**

- Patrick Reignier served as a member program committee for the National Conference on Artificial Intelligence
- James L. Crowley served as a member program committee for Ubicomp 2016
- Dominique Vaufreydaz served on the program committee of the 11th IEEE International Workshop on Multimedia Technologies for E-Learning (MTEL2016).
- Dominique Vaufreydaz served on the program committee for the 8th international on Knowledge and Systems Engineering (KSE 2016)
- Thierry Fraichard served as a member of the programme committee of the 1st Int. Workshop on Robot Learning and Planning (RLP) in conjunction with the "Robotics: Science and Systems" conference.

##### **9.1.3. Reviewer for conferences**

- Patrick Reignier served as a review for the International Journal of Datascience and Analytics
- James L. Crowley served as review for IEEE CVPR 2016
- James L. Crowley served as review for ICPR 2016
- James L. Crowley served as review for CNIA 2016
- James L. Crowley served as review for ECCV 2016
- James L. Crowley served as review for RFIA 2016
- Dominique Vaufreydaz served as review for Robotics and Autonomous Systems Journal
- Dominique Vaufreydaz served as review for UbiComp 2016
- Dominique Vaufreydaz served as review for ICSR 2016
- Thierry Fraichard served as a reviewer for the following conferences: RLP, IEEE Int. Conf. on Robotics and Automation (ICRA), and IEEE Int. Conf. on Advanced Intelligent Mechatronics (AIM).
- Thierry Fraichard reviewed articles for the following journals: Int. Journal of Aerospace Engineering, IEEE Trans. Intelligent Vehicles, and IEEE Trans. on Industrial Electronics.

##### **9.1.4. Journals**

- Thierry Fraichard reviewed articles for the Int. Journal of Aerospace Engineering, IEEE Trans. Intelligent Vehicles, and IEEE Trans. on Industrial Electronics.

###### **9.1.4.1. Member of the Editorial Boards**

- Sabine Coquillart is a member of the Editorial Board of the Advances in Human-Computer Interaction
- Sabine Coquillart is a member of the Scientific Committee of the Journal of Virtual Reality and Broadcasting.

- Sabine Coquillart is a member of the Advisory/Editorial Board for the International Journal of Computer Graphics SERSC.
- Sabine Coquillart is a Member of the Editorial Board of Peer Computer Science open access Journal in Computer Science.
- Sabine Coquillart is a member of the Editorial board (computer Sciences) of the Scientific World Journal.
- Sabine Coquillart is Review Editor for the Frontiers in Virtual Environments journal.
- Patrick Reignier is a member of the "comite de redaction" of the Modeling and Using Context journal (ISTE OpenScience)
- Thierry Fraichard is serving as an Associate Editor for IEEE Robotics and Automation Letters. He also served as an Associate Editor for IEEE/RSJ Int. Conf. on Robots and Systems (IROS).

### ***9.1.5. Leadership within the scientific community***

- Sabine Coquillart is elected member of the EUROGRAPHICS Executive Committee.
- Sabine Coquillart is member of the EUROGRAPHICS Working Group and Workshop board.
- Patrick Reignier is an elected member of the Association Française pour l'Intelligence Artificielle Executive Committee

### ***9.1.6. Scientific expertise***

- James L. Crowley served on the selection committee for Institut Universitaire de France (IUF)
- James L. Crowley served on the selection panel for the EC H2020 ICT Robotics program
- Dominique Vaufreydaz served as evaluator pour l'ANR
- Patrick Reignier served on the selection committee for an associate professor position at the University Grenoble Alps
- Thierry Fraichard served as an expert reviewer for the European Commission (H2020 FET and ICT calls).

### ***9.1.7. Research administration***

- James L. Crowley has been elected member of the Conseil d'Administration of the COMUE University Grenoble Alpes
- James L. Crowley has been elected member of the Conseil du Laboratoire of the Laboratoire Informatique de Grenoble.
- James L. Crowley serves on the Administrative Office (Bureau) for the Laboratoire Informatique de Grenoble.
- James L. Crowley Serves on the Commission d'Habilitation de Diriger la Recherche (HDR) for the Pole Informatics and Mathematics of the University Grenoble Alpes.
- James L. Crowley Serves on the Committee Scientific (CoS) d'Inria Grenoble Rhone-Alpes Research Center
- James L. Crowley Serves on Steering Committee of the Inovallee TARMAC technology Incubator.
- James L. Crowley is director of the Amiqua4Home Equipment of Excellence (EquipEx).
- Patrick Reignier is head of the engineering support group of the Laboratoire d'Informatique de Grenoble
- Patrick Reignier serves on the Administrative Office (Bureau) for the Laboratoire Informatique de Grenoble.

## **9.2. Teaching - Supervision - Juries**

### ***9.2.1. Teaching***

#### *9.2.1.1. James Crowley*

James Crowley is Director of the Master of Science in Informatics at Grenoble (MoSIG).

Master : Computer Vision, Course 27h EqTD, M2 year, Master of Science in Informatics at Grenoble

Master 1: Intelligent Systems, Cours 54h EqTD, ENSIMAG and UFRIM2AG

ENSIMAG 3 : Pattern Recognition and Machine Learning, Cours 27h EqTD, ENSIMAG

#### 9.2.1.2. Sabine Coquillard

- Master : Sabine Coquillard Taught a course on Virtual Reality and 3D User Interfaces for the GVR Master 2R
- Master : Sabine Coquillard teaches a one day course on 3D User Interfaces and Augmented Reality for the Numerical Modeling and Virtual Reality Master 2 in Laval.

#### 9.2.1.3. Thierry Fraichard

Master MOSIG 1st year: Introduction to Perception and Robotics, 22.5 hEqTD.

Master MOSIG 2nd year: Autonomous Robotics, 22.5 heqTD

#### 9.2.1.4. Dominique Vaufreydaz

Co-responsibility of the Graphic, Vision and Robotics track of the MOSIG Master programme.

Licence: Competences Numerique, 80h eqTD,L1, Universite Grenoble Alpes, France.

Licence: Informatique appliquee a l'economie et a la gestion, enseignement a distance, Licence, Universite Grenoble Alpes, France.

Licence: Pratique avancee du Tableur, 72 h eqTD, L3, Universite Grenoble Alpes, France.

Licence Professionnelle: Enquêtes et traitement d'enquêtes avec le logiciel Sphinx, 12h eqTD, Licence pro Metiers de l'Emploi et de la Formation, Universite Grenoble Alpes, France.

Licence Professionnelle: Administration en environnement heterogene, 20h eqTD, Licence pro Administration et Securite des Systemes et des Reseaux, Universite Grenoble Alpes, France.

IUT annee speciale: Programmation C++, 18h eqTD, Annee Speciale IUT Informatique, Universite Grenoble Alpes, France.

Master: Pratique avancee du Tableur, 22 h eqTD, M1 economie internationale et strategies d'acteurs, Universite Grenoble Alpes, France.

Master: Mise a niveau Informatique pour l'economie, 22h eqTD, M1 Economie des Organisations, Universite Grenoble Alpes, France

Master: Traitement des donnees du Web, 15h eqTD, M2 Mathematiques et Informatique Appliquees aux Sciences Humaines et Sociales, Universite Grenoble Alpes, France

Master: Developpement Web Mobile, 15h eqTD, M2 Mathematiques et Informatique Appliquees aux Sciences Humaines et Sociales, Universite Grenoble Alpes, France

Master: co-responsable de l'option Graphic Vision Robotic (GVR) du Master 2 MOSIG.

#### 9.2.1.5. Thierry Fraichard

- Master: Thierry Fraichard, Advanced Robotics, 54h eqTD, M2 MOSIG, Univ. of Grenoble, France.

#### 9.2.1.6. Patrick Reignier

- Patrick Reignier has been elected member of the Conseil des Etudes et de la Vie Universitaire of Grenoble INP
- Patrick Reignier has been nominated as a member of the Conseil de la Formation Continue de Grenoble INP
- Patrick Reignier Supervises the industrial part of the "formation en apprentissage" of the ENSIMAG engineering school.
- Master: Patrick Reignier, Projet Genie Logiciel, 55h eqTD, M1, ENSIMAG/Grenoble INP, France.

- Master : Patrick Reignier, Developpement d'applications communicantes, 18h eqTD, M2, ENSIMAG/Grenoble - INP, France
- Master : Patrick Reignier, Introduction aux applications reparties, 18h eqTD, M2, ENSIMAG/Grenoble - INP, France
- Master : Patrick Reignier, Applications Web et Mobiles , 27h eqTD, M1, ENSIMAG/Grenoble - INP, France
- Master : Patrick Reignier, Projet Systeme, 12h eq TD, M1, ENSIMAG/Grenoble - INP, France
- Master : Patrick Reignier, Algorithmique, 50h eq TD, M1, ENSIMAG/Grenoble INP, France
- Licence: Patrick Reignier, Projet C, 20h eqTD, L3, ENSIMAG/Grenoble INP, France.

### **9.2.2. Juries**

Thierry Fraichard served as a rapporteur for a doctoral jury at Universitat Politecnica de Valencia

Thierry Fraichard served as a rapporteur for a doctoral jury at INP Toulouse.

James Crowley served as a reporter for the doctoral jury of Ninghang Hu at the University of Amsterdam

## **RITS Project-Team**

# **9. Dissemination**

## **9.1. Promoting Scientific Activities**

### **9.1.1. Scientific Events Organisation**

#### *9.1.1.1. Member of the Organizing Committees*

Fawzi Nashashibi: member of the steering committee of VENITS 2016 (2nd International Workshop on Vehicular Networking and Intelligent Transportation Systems), Sep. 2016, Valencia, Spain

### **9.1.2. Scientific Events Selection**

#### *9.1.2.1. Member of the Conference Program Committees*

Guy Fayolle: scientific program committee member of *The IEEE Computer Society's MASCOTS 2016 (Modelling, Analysis and Simulation of Computer and Telecommunication Systems)*, September 21-23, Imperial College, London, UK.

Vicente Milanés: international program committee member of IEEE International Conference on Intelligent Transportation Systems (ITSC 2016).

Fawzi Nashashibi: international program committee member of IEEE Intelligent Vehicles Symposium (IV 2016).

Fawzi Nashashibi: IPC for the 2016 IEEE Intelligent Transportation Systems Conference (ITSC'2016), 8th Workshop on Planning, Perception and Navigation for Intelligent Vehicles, Nov. 2016, Rio de Janeiro.

Fawzi Nashashibi: member of the Technical Program Committee of the 14th Int. Conference on Control, Automation, Robotics and Vision, Nov. 2016, Phuket.

Fawzi Nashashibi: member of the Technical Program Committee of the 2016 International Conference on Computer Science and Artificial Intelligence, Aug. 2016, Guilin.

Oyunchimeg Shagdar: program committee member of the IEEE International Conference on Advanced Information Networking and Applications (AINA 2016).

Ahmed Soua: technical program committee member of IEEE International Conference on Communications and of International Workshop on Vehicular Adhoc Networks for Smart Cities (IWVSC 2016).

Anne Verroust-Blondet: technical program committee member of MMEDIA 2016.

#### *9.1.2.2. Reviewer*

Raoul de Charette: IEEE International Conference on Intelligent Transportation Systems (ITSC 2016).

Guy Fayolle: IEEE MASCOTS 2016 (Modelling, Analysis and Simulation of Computer and Telecommunication Systems) conference.

Jean-Marc Lasgouttes: IEEE MASCOTS 2016 (Modelling, Analysis and Simulation of Computer and Telecommunication Systems) conference.

Fawzi Nashashibi: International conference on Multidisciplinary in IT and Communication Science and Technologies 2016 (AIC-MITC), Transportation Research Board (TRB 2016), IEEE International Conference on Robotics and Automation (ICRA 2016), IEEE Intelligent Transportation Systems Conference (ITSC 2016), IEEE International Conference on Intelligent Robots and Systems (IROS 2016), International Conference on Advanced Robotics and Computer Vision (ICARCV 2016), Reconnaissance des Formes et Intelligence Artificielle (RFIA 2016).

Anne Verroust-Blondet: IEEE International Conference on Intelligent Transportation Systems (ITSC 2016).

### 9.1.3. Journal

#### 9.1.3.1. Member of the Editorial Boards

Guy Fayolle: associate editor of the journal *Markov Processes and Related Fields*

Vicente Milanés: editor-in-chief of Journal of Computer and Communications, associate Editor of Journal of Intelligent Transportation and Urban Planning.

Fawzi Nashashibi: associate editor of IEEE Transactions on Intelligent Vehicles, associate editor of the IEEE Transactions on Intelligent Transportation Systems, Editor of the Journal of Internet of Things (IoT) ISTE Editions (London).

Oyunchimeg Shagdar: associate editor of Wiley International Journal of Communication Systems.

#### 9.1.3.2. Reviewer - Reviewing Activities

Raoul de Charette: *Journal of Computer and Communications*.

Guy Fayolle: *AAP, MPRF, PTRF, QUESTA, European Journal of Combinatorics, JSP, Physica A*.

Jean-Marc Lasgouttes: *Journal of Applied Probability, IEEE Transactions on Knowledge and Data Engineering*.

Pierre Merdrignac: *IEEE Trans. on Intelligent Transportation Systems*.

Fawzi Nashashibi: *IEEE Transactions on Intelligent Vehicles, IEEE Transactions on Intelligent Transportation Systems, IEEE Intelligent Transportation Systems Magazine*.

Ahmed Soua: *IEEE Communications Letters*.

Thomas Streubel: *IEEE Transactions on Intelligent Vehicles*.

Anne Verroust-Blondet: *Transactions on Pattern Analysis and Machine Intelligence*.

### 9.1.4. Invited Talks

Raoul de Charette: "Perception research for Autonomous Vehicles", Sino-European Workshop on Information and Technology, Beijing, October 10-11 2016.

Guy Fayolle: "Random walks in the quarter-plane: explicit criterions for the finiteness of the associated group in the genus 1 case", Int. Conf. on Random Walks in Cones with Big Jumps, Tours, December 14-16 2016.

Fawzi Nashashibi:

1. Plenary keynote at the B.I.G. Forum (Big data Initiative of Gyeonggi). Invitation by the Gyeonggi Province and Seoul National University, Oct. 19-20, Pangyo, Korea.
2. Keynote speaker at the Plenary session of the International Conference on Advanced Robotics and Computer Vision (ICARCV'2016), Nov. 15, Phuket, Thailand.
3. Keynote at the French ASPROM Workshop "'De la connectée à la voiture autonome : technologies, enjeux et applications'", Feb. 10-11, Paris, France.
4. Keynote at the "'Algorithms for HRI Workshop 2016'", July 21, Paris, France.

Anne Verroust-Blondet: "Sketch-based 3D model retrieval", Whitehead Lectures in Cognition, Computation and Culture, Goldsmiths, University of London, 24 May 2016.

### 9.1.5. Scientific Expertise

Guy Fayolle is scientific advisor at the Robotics Laboratory of Mines ParisTech.

Jean-Marc Lasgouttes is member of the Conseil Académique of Université Paris-Saclay.

### 9.1.6. Research Administration

Jean-Marc Lasgouttes is a member of the Comité Technique Inria.



Guy Fayolle is a member of the working group IFIP WG 7.3.

Fawzi Nashashibi is a member of the international Automated Highway Board Committee of the TRB (AHB30). He is a member of the Board of Governors of the VEDECOM Institute representing Inria and of the Board of Governors of MOV'EO Competitiveness cluster representing Inria.

Anne Verroust-Blondet is the scientific correspondent of the European affairs and of the International relations of Inria Paris. She is member of the COST-GTRI committee at Inria.

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

Licence: Fawzi Nashashibi, "Programmation avancée", 84h, L1, Université Paris-8 Saint-Denis, France.

Master: Jean-Marc Lasgouttes, "Analyse de données", 54h, second year of Magistère de Finance (M1), University Paris 1 Panthéon Sorbonne, France.

Master: Fawzi Nashashibi, "Image synthesis and 3D Infographics", 12h, M2, INT Télécom Sud-Paris

Master: Fawzi Nashashibi, "Obstacle detection and Multisensor Fusion", 4h, M2, INSA de Rouen.

Master: Fawzi Nashashibi, "Perception and Image processing for Mobile Autonomous Systems", 12h, M2, University of Evry.

Master: Oyunchimeg Shagdar, "Nouvelles technologies de communication", 32h, M2, University Versailles Saint-Quentin, France.

Master : Pierre Merdrignac, Introduction au traitement d'image, 12h (M1), Université Versailles Saint-Quentin en Yvelines, France.

Master: David González Bautista and Anne Verroust-Blondet, "Le véhicule autonome. Présentation des recherches de l'équipe-projet RITS", 1.5 h, 2nd year, Ecole des Ponts ParisTech, France, Sept. 2016.

Doctorat: Jean-Marc Lasgouttes, "Analyse de données fonctionnelles", 31.5h, Mastère Spécialisé "Expert en sciences des données", INSA-Rouen, France

### 9.2.2. Supervision

PhD: Mohammad Abualhoul, "Visible light and radio communication for cooperative autonomous driving: applied to vehicle convoy", Mines ParisTech, December 2016, supervisor: Fawzi Nashashibi, co-supervisor: Oyunchimeg Shagdar. (cf. [17])

PhD: Guillaume Trehard, "Gestion des intersections pour la conduite urbaine autonome", Mines ParisTech, February 2016, supervisor: Fawzi Nashashibi.(cf. [18]).

PhD in progress : Zayed Al-Sayed, "Système de localisation redondant en environnement extérieur ouvert pour véhicule urbain automatique", Télécom ParisTech, October 2014, supervisor: Anne Verroust-Blondet, co-supervisor: Guillaume Bresson.

PhD in progress : David González Bautista, "Contrôle coordonné et planification dynamique des trajectoires pour un système de transport cybernétique en milieu urbain instrumenté", Mines ParisTech, January 2014, supervisor: Fawzi Nashashibi.

PhD in progress : Pierre de Beaucorps, "Autonomous vehicle: behavior prediction and Interaction with road users", UPMC Paris, January 2016, supervisor: Anne Verroust-Blondet, co-supervisor: Fawzi Nashashibi.

PhD in progress : Fernando Garrido Carpio, "Optimal trajectory generation for autonomous vehicles in urban environments" , Mines ParisTech, November 2014, supervisor: Fawzi Nashashibi, co-supervisors: Vicente Milanés, Joshué Pérez.

PhD in progress : Carlos Flores, “Analysis and design of cooperative systems for trains of green cars”, Mines ParisTech, December 2015, supervisor: Fawzi Nashashibi, co-supervisor: Vicente Milanés.

PhD in progress : Francisco Navas, “Plug&Play control for highly non-linear systems: Stability analysis of autonomous vehicles”, Mines ParisTech, October 2015, supervisor: Fawzi Nashashibi, co-supervisor: Vicente Milanés.

PhD in progress : Dinh-Van Nguyen, "Wireless sensor networks for indoor mapping and accurate localization for low speed navigation in smart cities", Mines ParisTech, December 2015, supervisor: Fawzi Nashashibi, co-supervisor: Eric Castelli.

Starting PhD: Farouk Ghallabi, “Environment modeling and simultaneous localization of a mobile vehicle on motorways: a multi-sensor approach”, Mines ParisTech, October 2016, supervisor: Fawzi Nashashibi.

### 9.2.3. Juries

Guy Fayolle was a jury member of the PhD thesis defense of Mohamed Hadded "Design and Optimization of Access Control Protocols in Vehicular Ad Hoc Networks (VANETs)", Télécom SudParis, 30 November 2016. Fawzi Nashashibi was a reviewer and examiner of the following PhD theses:

- Rémy Sohier – « Sensibilité artistique et création vidéoludique : Critique du jeu par le jeu et modèle ludographique ». Université Paris VIII Saint-Denis, 28 November 2016 – Reviewer
- Yiyuan Huang – « Méthode de création numérique et interactivité inconsciente entre philosophie de l’oeuvre et psychologie du participant. Ré-exploration de la peinture traditionnelle chinoise de manière numérique en utilisant l’installation artistique interactive ». Université de Paris VIII Saint-Denis, département Arts et Technologies de l’Image. 14 June 2016 – Reviewer
- Adela Sirbu – « Dynamic Machine Learning for Supervised and Unsupervised Classification”. Thèse en cotutelle de l’Université BABES-BOLYAI, CLUJ-NAPOCA et de l’Université de Normandie délivrée par INSA Rouen. 6 June 2016 – Reviewer
- Carlos Fernandez-Lopez – «Road Scene Interpretation For Autonomous Navigation Fusing Stereo Vision and Digital Maps». Université de Alcalá (Spain). 23 September 2016 – Examiner

Anne Verroust-Blondet was:

- the external examiner of the PhD Examining Committee of Prashant Aparajeya’s PhD "Medialness-based shape invariant feature transformation", Goldsmith, University of London (UK), 23 May 2016.
- a jury member of the PdD thesis defense of Arthur Truong "Analyse du contenu expressif des gestes corporels", Télécom SudParis, 21 September 2016.

## 9.3. Popularization

An article about YoGoKo (spinoff RITS) was published by bpiFrance. “YoGoKo joue la connectivité routière”. Date: 09/02/2016.

“La Tribune” published an article about the Link&Go prototype developed by AKKA Technologies and Inria-Rits. “Voiture autonome : la LINK & GO d’AKKA veut sortir des frontières”, pp.72-73. Date: 29/06/2016. Journalist: Marie-Annick Depagneux.

Fawzi Nashashibi was interviewed in the “L’Auto-Journal” journal. Title: “Les voitures autonomes sont là”. Date : 21/01-03/02 16. OJD : 105052, pp.30-32. Journalist: Brice Perrin.

Fawzi Nashashibi was interviewed in the “Usine Nouvelle” journal. Title: “À la recherche du véhicule vraiment autonome”. Date: 14/04/2016. Also: “Le véhicule autonome fait avancer la simulation”, pp. 48-49. Journalist: Frédéric Parisot.

Fawzi Nashashibi was interviewed in the “webcar center” (<http://www.webcarcenter.com> ). Title: “Conduite autonome : les premières voitures sont là”. Date: 10/02/2016. Journalist: Brice Perrin.

Fawzi Nashashibi was interviewed by “L’Automobile & L’Entreprise” (<http://www.automobile-entreprise.com>). Journalist: Séverine Fontaine.

Fawzi Nashashibi was interviewed by “Télérama” magazine. Title: “IA : c’est vraiment demain?”. Date : 23/04-29/04 16. OJD : 578680. Journalists: Olivier Tesquet / Richard Sénéjoux.

Fawzi Nashashibi was interviewed by "Innovation Review". Title: “Voitures autonomes : quel est le rôle du « deep learning »?”. Journalist: Thibault Lescuyer.

Fawzi Nashashibi was interviewed by “Les Echos” newspaper. Title: “Google Car, le robot qui a remis la voiture autonome dans la course”. Date: 02-03 Sept. 2016, pp.10-11. Journalist: Jacques Henno.

Fawzi Nashashibi was interviewed by “Science & Vie Special Edition - High Tech -”. Title: “Voiture connectée : la révolution cachée”, pp. 78-83. Date: N 43/2016.

Fawzi Nashashibi was interviewed by “Industrie & Technologies”. Title: “Pourquoi et comment les véhicules autonomes vont devoir coopérer”. Date: 11/10/2016. Journalist: Juliette Raynal. (<https://www.industrie-techno.com/pourquoi-et-comment-les-vehicules-autonomes-vont-devoir-cooperer.46065>).

Fawzi Nashashibi participated to a radio program on France Culture, La méthode scientifique, “Jusqu’où ira l’autonomie des voitures?”, September 28, 2016.

Fawzi Nashashibi participated to a round table on “Transports et énergies du futur” for the event *Science en direct*, organized at the Cité des sciences et de l’industrie, Paris, October 8, 2016.

RITS team members participated to the making of a short movie dedicated to Teletoon Channel. Title/Serie: “Culture Décode”. Date: 09/12/2016. Journalist: Benjamin Brun (Tralalère: <http://www.tralalere.com/>).

## AYIN Team

# 8. Dissemination

## 8.1. Promoting Scientific Activities

### 8.1.1. Scientific Events Organisation

#### 8.1.1.1. Member of the Organizing Committees

- Josiane Zerubia in collaboration with Farzad Kamalabadi from UIUC organized a special session at the Symposium URSI-France (<http://ursi-france.telecom-paristech.fr/evenements/journees-scientifiques/2017.html>) in Sophia Antipolis (February 2017).
- Josiane Zerubia is part of the organizing committee and will be co-Chair of the EARTHVISION workshop at CVPR'17 (<http://cvpr2017.thecvf.com/>) in Hawaii, USA, in July 2017.
- Josiane Zerubia is part of the organizing committee of the 50th GRETSI conference (<http://gretsi.fr/colloque2017/2016/10/bienvenue-au-gretsi-2017/>) which will take place in Juan-les-Pins, in September 2017.

### 8.1.2. Scientific Events Selection

#### 8.1.2.1. Member of the Conference Program Committees

- Josiane Zerubia was part of the conference program committee of SYNASC'16 (<http://synasc.ro/2016/>) in Timisoara, Romania, in September 2016.
- Josiane Zerubia was part of the conference program committee of ISPRS/SPIE Remote Sensing'16 (<http://spie.org/Documents/ConferencesExhibitions/ERS-ESD16-Final-Ir.pdf>) in Edinburgh, UK, in September 2016.

#### 8.1.2.2. Reviewer

- Josiane Zerubia was a reviewer for the conferences IEEE ICASSP'16, IEEE ICIP'16, ISPRS-SPIE Remote Sensing'16, ECCV'16, IEEE CVPR'16, IAPR ICPR'16, IEEE EMBC'16, IEEE-EURASIP EUSIPCO'16 and SYNASC'16.

### 8.1.3. Journal

#### 8.1.3.1. Member of the Editorial Boards

- Josiane Zerubia is an Associate Editor of the collection "Foundation and Trends in Signal Processing" (<http://www.nowpublishers.com/SIG>).
- Josiane Zerubia is a member of the Editorial Board of the "Revue Française de Photogrammétrie et de Télédétection of SFPT" (<http://www.sfpt.fr/rfpt/>).
- Josiane Zerubia is an Associate Editor of the electronic journal Earthzine (<http://www.earthzine.org/>).

#### 8.1.3.2. Reviewer - Reviewing Activities

- Ihsen Hedhli was a reviewer for IEEE TGRS, TGRL and TIP journals and Elsevier Pattern Recognition Letters.

### 8.1.4. Invited Talks

- As IEEE SPS Distinguished Lecturer, Josiane Zerubia gave in 2016 ten invited talks: at DITEN Dept., University of Genoa, Italy, at the Faculty of Mathematics and Computer Science from the West University of Timisoara, Romania, at the Faculty of Electronics, Telecommunications & IT and the Faculty of Medical Engineering, University Politehnica of Bucharest, Romania, at the Georgia Tech Research Institute in Atlanta, USA, at the SenSIP Center, School of Electrical, Computer & Energy Engineering, Arizona State University, Tempe, USA, at both the Sine Seminars and the Remote Sensing Seminars, within the Coordinated Science Laboratory, University of Illinois at Urbana Champaign, USA, at the Signal and Communications laboratory in the Dept. of Engineering, University of Cambridge, UK, at the Faculty of Engineering, University of Bristol, UK, and finally a plenary talk at the international symposium ISIVC2016 in Tunis, organized by Sup'Com (see [http://www.supcom.mincom.tn/Fr/Fr/Fr/actualites-de-l-ecole\\_7\\_280\\_D875#.WG0L9jU5ReR](http://www.supcom.mincom.tn/Fr/Fr/Fr/actualites-de-l-ecole_7_280_D875#.WG0L9jU5ReR)).

### 8.1.5. Leadership within the Scientific Community

- Josiane Zerubia is IEEE Fellow ([http://www.ieee.org/membership\\_services/membership/fellows/index.html](http://www.ieee.org/membership_services/membership/fellows/index.html)) since 2003 and IEEE SPS Distinguished Lecturer since 2016 (<http://signalprocessingsociety.org/newsletter/2015/11/sps-announces-2016-class-of-distinguished-lecturers/>).

### 8.1.6. Scientific Expertise

- Josiane Zerubia was a reviewer for the Israeli Ministry of Science, Technology and Space (<http://most.gov.il/english/Pages/default.aspx>)
- Josiane Zerubia is part of the Scientific Council of Academy 3 of UCA-Jedi (<http://univ-cotedazur.fr/english/index-uca-jedi/academies-of-excellence>) dedicated to "Space, Environment, Risks and Resilience".

### 8.1.7. Research Administration

- Josiane Zerubia is part of the Board of Directors of the French Photogrammetry and Remote Sensing Society (<http://www.sfpt.fr/sfpt/bureau/>).
- Josiane Zerubia is a member of the Inria-SAM Center Committee since 2016.

## 8.2. Teaching - Supervision - Juries

### 8.2.1. Teaching

- Masters: Josiane Zerubia, Advanced Techniques in Signal and Image Processing, 30h eq. TD (20h of lectures), ISAE/SUPAERO, France. Josiane Zerubia is also director of this course (total: 30h of lectures and 10h of TD). This course was given to third-year students at ISAE/SUPAERO and was also validated by the M2 of Applied Mathematics at the University Toulouse III Paul Sabatier, France.
- Masters: Josiane Zerubia, Deconvolution and Denoising in Confocal Microscopy, 18h eq. TD (12h of lectures), M2 BCC, Université de Nice Sophia-Antipolis, France. Josiane Zerubia is also director of this course (total: 24h of lectures).
- Summer School (PhD and Post-doc level): Josiane Zerubia gave a presentation at the Summer School SSMIA'16 in Budapest, Romania.

### 8.2.2. Supervision

PhD (defended with best honors): Ihsen Hedhli, Change detection methods for multisensor and multiresolution remote sensing images for applications to environmental disaster management, University of Genoa and Université Nice Sophia Antipolis, started in January 2013, defended in March 2016, Gabriele Moser and Josiane Zerubia.

### 8.2.3. Juries

- Josiane Zerubia was a member of a PhD defense committee at University of Genoa, in Italy, in March 2016.

### **8.3. Popularization**

- Josiane Zerubia presented Inria and Inria-SAM to Masters, PhDs and Post-docs of the following foreign universities during 2016: University of Genoa, West University of Timisoara, Georgia Tech, Arizona State University, University of Illinois at Urbana Champaign, University of Cambridge, University of Bristol.
- Josiane Zerubia was interviewed in August with two other French women scientists working in remote sensing by a journalist for Earthzine (webzine supported by IEEE and NASA) see <https://earthzine.org/2016/10/13/the-three-musketeers-making-an-impact-in-french-remote-sensing-and-breaking-down-gender-barriers/>
- In September, Josiane Zerubia actively participated to a debate about Women in Signal Processing at the IEEE International Conference ICIP' 16 (<http://2016.ieeeicip.org/>) in Phoenix, USA
- Josiane Zerubia, with Gabriele Moser and Sebastiano Serpico from University of Genoa, wrote in December an article about natural disaster monitoring for ERCIM News, see <http://ercim-news.ercim.eu/en108/special/natural-disaster-monitoring-multi-source-image-analysis-with-hierarchical-markov-models>.

## LINKMEDIA Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. General Chair, Scientific Chair

Laurent Amsaleg was the technical program chair of the Intl. Conf. on Similarity Search and Applications 2016.

Laurent Amsaleg and Vincent Claveau, with X. Tannier (LIMSI-CNRS), D. Nouvel (Inalco) organized a workshop about Computational Journalism. More than 50 persons (computer scientists, sociologists, and news/media compan fellows) attended. Program available at <http://compjournalism2016.irisa.fr>.

Pascale Sébillot is a member of the permanent steering committee of Conf. Francophone en Traitement Automatique des Langues Naturelles.

#### 10.1.1.2. Member of the Organizing Committees

Simon Malinowski was in the organizing committee of the Workshop on Advanced Analysis and Learning on Temporal Data (AALTD 16) held in Riva del Garda, colocated with ECML/PKDD 2016.

Guillaume Gravier was co-chair of a special session at The Speaker and Language Recognition Workshop Odyssey 2016.

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Chair of Conference Program Committees

Vincent Claveau was area chair of the French-speaking conference Traitement Automatique du Langage Naturel 2016.

Guillaume Gravier was technical program chair of the International Workshop on Content-Based Multimedia Indexing 2016.

Guillaume Gravier was area chair of the ACM Intl. Conf. on Multimedia 2016.

Guillaume Gravier was technical program chair of the French-speaking international conference Journées d'Études sur la Parole 2016.

Pascale Sébillot was area chair of the French-speaking conference Traitement Automatique du Langage Naturel 2016.

#### 10.1.2.2. Member of Conference Program Committees

Laurent Amsaleg was a PC member of: Intl. Conf. on Similarity Search and Applications; ACM Intl. Conf. on Multimedia Retrieval; IEEE Intl. Conf. on Multimedia and Exhibition.

Yannis Avrithis was a PC member of: IEEE Conference on Computer Vision and Pattern Recognition; European Conference on Computer Vision; British Machine Vision Conference; ACM Multimedia Conference on Multimedia; European Signal Processing Conference; Intl. Conference on Multimedia and Expo; IEEE Intl. Conference in Image Processing; IEEE Intl. Conference on Acoustics, Speech, and Signal Processing; Intl. Workshop on Content-Based Multimedia Indexing.

Vincent Claveau was a PC member of: ACL demonstration track; Workshop on Content-Based Multimedia Indexing; Conf. Traitement Automatique du Langage Naturel; CORIA; Language Resources and Evaluation Conf.

Teddy Furon was a PC member of ACM Information Hiding and Multimedia Security.

Guillaume Gravier was a PC member of: ACM Intl. Conf. on Multimedia; IEEE Intl. Conf. on Multimedia and Exhibition; Annual Conf. of the Intl. Speech Communication Association; IEEE Intl. Workshop on Multimedia Signal Processing; European Conf. on Information Retrieval; Conf. on Knowledge and Information Management; IEEE Intl. Conf. on Acoustics, Speech and Signal Processing; Intl. Conf. on Statistical Language and Speech Processing; Language Resources and Evaluation Conf.

Ewa Kijak was a PC member of Intl. Workshop on Content-Based Multimedia Indexing.

Pascale Sébillot was a PC member of: ACM International Conference on Information and Knowledge Management; European Conference on Information Retrieval; Conférence nationale en intelligence artificielle; Conf. Traitement Automatique des Langues Naturelles; Colloque international sur l'écrit et le document

#### *10.1.2.3. Reviewer*

Ewa Kijak reviewed for ACM Conf. on Multimedia.

Pascale Sébillot was a scientific committee member of: Language Resources and Evaluation Conference

### **10.1.3. Journal**

#### *10.1.3.1. Member of the Editorial Boards*

Vincent Claveau is member of the editorial board of the journal Traitement Automatique des Langues.

Vincent Claveau was guest editor of the special issue on Information Retrieval and Natural Language Processing of the journal Traitement Automatique des Langues (published in 2016).

Guillaume Gravier was appointed associate editor of IEEE Trans. on Multimedia in Sep. 2016.

Guillaume Gravier is guest editor of the special issue of Multimedia Tools and Applications on content-based multimedia indexing (to appear in 2017).

Guillaume Gravier was editor of the Working Notes Proc. of the MediaEval Multimedia Benchmark.

Pascale Sébillot is editor of the Journal Traitement Automatique des Langues.

Pascale Sébillot is member of the editorial board of the Journal Traitement Automatique des Langues.

#### *10.1.3.2. Reviewer - Reviewing Activities*

Laurent Amsaleg was a reviewer for: IEEE Trans. on Circuits and Systems for Video Technology, IEEE Trans. on Multimedia, Pattern Recognition Letters, IEEE Trans. on Information Forensics & Security, IEEE Trans. on Image Processing.

Yannis Avrithis was a reviewer for Multimedia Tools and Applications, Elsevier Neurocomputing.

Vincent Claveau reviewed for Multimedia Tools and Applications, Elsevier Knowledge-Based Systems, Elsevier Information Sciences, Traitement Automatique des Langues.

Teddy Furon is a reviewer for IEEE Trans. on Information Forensics and Security, Elsevier Digital Signal Processing, EURASIP Journal of Information Security, IEEE Trans. on Image Processing, IEEE Trans. on Signal Processing.

Guillaume Gravier reviewed for Computer Speech and Language.

Pascale Sébillot was member of the reading committee for several issues of the Journal Traitement Automatique des Langues.

### **10.1.4. Invited Talks**

Yannis Avrithis gave an invited talk at Pattern Recognition and Computer Vision Colloquium on March 31 in Prague, <http://cmp.felk.cvut.cz/cmp/events/colloquium-2016.03.31>.

Vincent Claveau gave an invited talk at Congrès de l'ACFAS, colloque Documents et ressources pour leur traitement : un couplage crucial, Montreal.

Vincent Claveau gave an invited talk at Séminaire D2K du labex Digicosme, Paris.



Vincent Claveau gave an invited talk at Séminaire commun RALI-OLST, Montréal.

Guillaume Gravier gave an invited talk at the ACM Multimedia 2016 TPC workshop.

Guillaume Gravier was invited as a panelist at the Intl. Workshop on Content-Based Multimedia Indexing.

Guillaume Gravier gave an invited talk at the Journées de Statistique de Rennes (JSTAR).

Guillaume Gravier animated a round-table on 'Jeux de données et données en jeu : l'accès des données à des fins de recherche' at the Rencontres du Numérique organized by the National Research Agency (ANR).

Simon Malinowski gave an invited talk on time series classification at PUC Minas, Brazil.

Pascale Sébillot gave an invited tutorial (8h) about NLP at Institut de l'information scientifique et technique (INiST) Nancy.

### ***10.1.5. Leadership within the Scientific Community***

Laurent Amsaleg was nominated to be part of the Steering Committee of SISAP for a 2016–2020 term.

Vincent Claveau is finance head of the Association pour la Recherche d'Informations et ses Applications (ARIA).

Guillaume Gravier is president of the Association Francophone de la Communication Parlée (AFCP), French-speaking branch of the Intl. Speech Communication Association.

Guillaume Gravier is co-founder and general chair of the ISCA SIG Speech, Language and Audio in Multimedia.

Guillaume Gravier is member of the Community Council of the Mediaeval Multimedia Evaluation series.

Guillaume Gravier is the technical representative of Inria in the cPPP Big Data Value Association, actively working on technical aspects of data analytics.

### ***10.1.6. Scientific Expertise***

Laurent Amsaleg was an Expert Evaluator for the Luxembourg National Research Fund, 2016.

Vincent Claveau was an expert for the FNRS (Belgian funding agency).

Vincent Claveau was an expert for GIFAS - Groupement des Industries Françaises Aéronautiques et Spatiales.

Vincent Claveau was an expert for the Programme Hubert Curien (funding program for bilateral projects).

Teddy Furon is scientific adviser for the company LAMARK.

Guillaume Gravier was vice-president of the Scientific Evaluation Committee of the National Research Agency for the theme 'Interaction, Robotic, Content, Automatic' up to July 2016.

Since September 2016, Guillaume Gravier is president of the Scientific Evaluation Committee of the National Research Agency for the theme 'Knowledge, data, content, big data, HPC, simulation'.

### ***10.1.7. Research Administration***

Vincent Claveau is deputy head of the GdR MaDICS, a CNRS inter-lab initiative to promote research about Big Data and Data Science.

Guillaume Gravier is a member of the Board of the technology cluster Images & Réseaux.

Guillaume Gravier is a member of the Board of the Comité des Projets of Inria - Rennes Bretagne Atlantique.

Pascale Sébillot is a member of the Conseil National des Universités 27th section (computer science).

Pascale Sébillot is the director of the Computer Science Laboratory, INSA Rennes.

Pascale Sébillot is the deputy director of the Scientific Advisory Committee of IRISA UMR 6074.

Pascale Sébillot is a member of the theses advisory committee of the Matisse doctoral school.

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

For researchers, all activities are given. For professors and assistant professors, only courses at the M. Sc. level are listed.

Licence: Teddy Furon, Probabilities, 40h, L1, Agrocampus Rennes, France

Licence: Guillaume Gravier, Databases, 30h, L2, INSA Rennes, France

Licence: Guillaume Gravier, Probability and statistics, 16h, L3, INSA Rennes, France

Licence: Guillaume Gravier, Natural Language Processing, 12h, L3, INSA Rennes, France

Master: Laurent Amsaleg, Multidimensional indexing, 13h, M2, University Rennes 1, France

Master: Vincent Claveau, Information retrieval, 7h, M2, ENSAI, Rennes, France

Master: Vincent Claveau, Data-Based Knowledge Acquisition: Symbolic Methods, 20h, M1, INSA de Rennes, France

Master: Vincent Claveau, Text Mining, 36h, M2, Univ. Rennes 1, France

Master: Vincent Claveau, Machine Learning for symbolic and sequential data, 7h, M2, Univ. Rennes 1, France

Master: Vincent Claveau, Information Retrieval, 15h, M2, ENSSAT, France

Master: Vincent Claveau, Information Retrieval, 13h, M2, Univ. Rennes 1, France

Master: Teddy Furon, Rare events, 20h, M2, Insa Rennes, France

Master: Guillaume Gravier, Data analysis and probabilistic modeling, 30h, M2, University Rennes 1, France

Master: Ewa Kijak, Image processing, 64h, M1, ESIR, France

Master: Ewa Kijak, Supervised learning, 15h, M2R, University Rennes 1, France

Master: Ewa Kijak, Supervised learning, 45h, M1, ESIR, France

Master: Ewa Kijak, Statistical data mining, 14h, M2, University Rennes 1, France

Master: Ewa Kijak, Indexing and multimedia databases, 15h, M2, ENSSAT, France

Master: Ewa Kijak, Computer vision, 15h, M2, ESIR, France

Master: Simon Malinowski, Short-term time series prediction, 29h, M1, Univ. Rennes 1

Master: Simon Malinowski, Supervised Learning, 10h, M2, Univ. Rennes 1

Master: Pascale Sébillot, Data-Based Knowledge Acquisition: Symbolic Methods, 14h, M1, INSA Rennes, France

Master: Pascale Sébillot, From multimedia documents structuring to multimedia collections structuring, 2h, M2 Language Industry, Université Grenoble-Alpes, France

Master: Pascale Sébillot, Advanced Databases and Modern Information Systems, 70h, M2, INSA Rennes, France

Master: Pascale Sébillot, Logic Programming, 12h, M1, INSA Rennes, France

### 10.2.2. Supervision

PhD: Raghavendran Balu, Privacy-preserving data aggregation and service personalization using highly-scalable data indexing techniques, defended Nov. 2016, Teddy Furon and Laurent Amsaleg

PhD: Petra Bosilj, Content based image indexing and retrieval using hierarchical image representations, defended Jan. 2016, Ewa Kijak and Sebastien Lefèvre (with OBELIX, IRISA team)

PhD: Thomas Gaillat, Reference in interlanguage: The case of this and that, defended Jun. 2016, Nicolas Ballier and Pascale Sébillot (with Université Paris Diderot)

PhD in progress: Rémi Bois, Navigable directed multimedia hypergraphs: construction and exploitation, started October 2014, Guillaume Gravier and Pascale Sébillot

PhD in progress: Ricardo Carlini Sperandio, Unsupervised motif mining in multimedia time series, started August 2015, Laurent Amsaleg and Guillaume Gravier

PhD in progress: Ahmet Iscen, Continuous memories for representing sets of vectors and image collections, started September 2014, Teddy Furon

PhD in progress: Grégoire Jadi, Opinion mining in multimedia data, started October 2014, Vincent Claveau, Béatrice Daille (LINA, Nantes) and Laura Monceaux (LINA, Nantes)

PhD in progress: Raheel Kareem Qader, Phonology modeling for emotional speech synthesis, started January 2014, Gwénolé Lecorvé and Pascale Sébillot (with EXPRESSION, IRISA Team)

PhD in progress: Mathieu Laroze, Active learning on adaptive representations for object detection in high-resolution imaging, started June 2016, Romain Dambreville, Chloe Friguet, Ewa Kijak and Sebastien Lefevre (with OBELIX, IRISA team)

PhD in progress: Cédric Maigrot, Detecting fake information on social networks, started October 2015, Laurent Amsaleg, Vincent Claveau and Ewa Kijak

PhD in progress: Vedran Vukotič, Deep neural architectures for automatic representation learning from multimedia multimodal data, started October 2014, Guillaume Gravier and Christian Raymond

PhD in progress: Oriane Simeoni, Invariance and supervision in visual learning, started Oct. 2016, Yannis Avrithis and Guillaume Gravier

PhD in progress: Mikail Demirdelen, User-adapted multi-document multimedia synthesis, started Oct. 2016, Guillaume Gravier and Pascale Sébillot

PhD in progress: Clément Dalloux, Clinical Text Mining and Indexing, started Dec. 2016, Olivier Dameron and Vincent Claveau (with DYLISS projet-team)

### 10.2.3. Juries

Vincent Claveau

PhD, reviewer, Gabriel Bernier-Colborne, Université de Montréal, Canada

Teddy Furon

PhD, reviewer, Thijs Laarhoven, Eindhoven University

PhD, jury member, Julien Lolive, Télécom-Bretagne Brest

Guillaume Gravier

PhD, reviewer and president, Xavier Bost, Université d'Avignon et des Pays du Vaucluse

Ewa Kijak

PhD, Hassan Wehbe, Université Toulouse III

Pascale Sébillot

PhD, reviewer, Jean-Philippe Fauconnier Biard, Université Toulouse 3

PhD, member, Abdessalam Bouchekif, Université du Maine

PhD, member, Sana Ben Nasr, Université de Rennes 1

HDR, member, Olivier Ferret, Université Paris Sud 11

### **10.3. Popularization**

Vincent Claveau

An article entitled 'Vélos, bicyclettes et moteur de recherche', was published by ACFAS on its website

An article entitled 'Détecter l'intox sur Twitter' was published in a special issue of the Dossiers de l'Université de Rennes 1

## MAGRIT Project-Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Scientific Events Selection

#### 9.1.1.1. Member of the Conference Program Committees

- M.-O. Berger was member of the program committee of: International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI 2016), International Conference on Pattern recognition (ICPR 2016), International Conference on Robotic and automation (ICRA 2016), International Conference on Information Processing in Computer assisted interventions (IPCAI 2017)
- Erwan Kerrien was a member of the program committee of MICCAI 2016 and of IPCAI 2017.
- F. Sur was a member of the program committee of RFIA 2016 (Reconnaissance des formes et intelligence artificielle).
- P.-F. Villard was member of the program committee of MICCAI 2016, International Conference on Computer Graphics, Visualization, Computer Vision and Image Processing 2016, Eurographics Workshop on Visual Computing for Biology and Medicine 2016.

#### 9.1.1.2. Reviewer

M.-O. Berger was a reviewer for IROS 2016.

### 9.1.2. Journal

#### 9.1.2.1. Reviewer - Reviewing Activities

The members of the team reviewed articles in Computers in Biology and Medicine (Elsevier), Digital Signal Processing, IEEE Transactions on Biomedical Engineering.

### 9.1.3. Invited Talks

- Pierre-Frédéric Villard gave a seminar on "Mitral Valve Biomechanical Model Construction" at the Department of Cardiac Surgery at Boston Children's Hospital, Boston (USA) on the 08/01/2016

### 9.1.4. Scientific Expertise

- Marie-Odile Berger was a member of the HCERES visiting committee of LTSI (Rennes)
- Marie-Odile Berger was president of the AFRIF thesis prize and member of the GDR Robotique thesis prize.
- Marie-Odile Berger is president of the Association française pour la reconnaissance et l'interprétation des formes (AFRIF)

### 9.1.5. Research Administration

- Marie-Odile Berger is a member of the Inria evaluation committee.
- Gilles Simon is Chargé de Mission Loria to take part in an EIT's KIC (Knowledge and Innovation Communities) proposal in the thematic of manufacturing (KIC Added-value Manufacturing).

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

The four associate professors of the MAGRIT team actively teach at Université de Lorraine with an annual number of around 200 teaching hours in computer sciences, some of them being accomplished in the field of image processing. Inria researchers have ponctual teaching activities in computer vision and shape recognition mainly in the computer science Master of Nancy and in several Engineering Schools near Nancy (ENSMN Nancy, SUPELEC Metz, ENSG). Our goal is to attract Master students with good skills in applied mathematics towards the field of computer vision. The list of courses given by staff members which are tightly related to image processing and computer vision is detailed below:

- Licence: Graphic and haptic rendering, 30h, IUT Saint-Dié des Vosges.
- Licence: Image processing, 30h, IUT Saint-Dié des Vosges.
- Licence: 3D programming, 30h, IUT Saint-Dié des Vosges.
- Game design with Unity3D , 15h, IUT Saint-Dié des Vosges.
- Introduction to augmented reality, 6h, IUT Saint-Dié des Vosges.
- Master: Signal analysis, 50 h, Université de Lorraine.
- Master: Augmented reality, 24 h, Télécom-Nancy, Université de Lorraine.
- Master : Introduction to computer vision, 12h, Université de Lorraine.
- Master : Shape recognition, 15 h, Université de Lorraine.
- Master : Computer vision: foundations and applications, 15 h, Université de Lorraine.
- Master : Introduction to image processing, 21 h, École des Mines de Nancy
- Master : Image processing for Geosciences, ENSG, 12h.
- Master : Introduction to signal processing and applications, 21 h, Ecole des Mines de Nancy
- Master : Augmented reality, 24h, M2 IHM Metz
- Master : Augmented reality, 3 h, SUPELEC Metz.

In addition, G. Simon was interim director of the CESS (Centre d'Études Supérieures et Scientifiques) in Epinal, a branch of the science faculty of Nancy, from january to april 2016. He is also head of the Licence professionnelle Infographie Paysagère of the faculty of Nancy.

A software, named artEoz, has been co-designed by B. Wrobel-Dautcourt [21]. It aims at supporting students in learning computer programming. artEoz original design stems from the author's long term experience in teaching object oriented programming. It offers the students a pedagogical view of the memory state, that is dynamically updated while the user's program runs. artEoz can be freely downloaded for academic use only. This year, we have proposed an on-line version of the software. Documentation, tutorials, on-line tools and download are available on the website <http://arteoz.loria.fr>. Tutorials can be customized to fit different students' needs.

### 9.2.2. Supervision

PhD in progress: Pierre Rolin, Calcul de pose par simulation de points de vue pour la réalité augmentée, octobre 2013, Marie-Odile Berger, Frédéric Sur.

PhD in progress: Charlotte Delmas, Reconstruction 3D des outils chirurgicaux en radiologie interventionnelle, avril 2013, Marie-Odile Berger, Erwan Kerrien.

PhD in progress: Antoine Fond, Introduction de sémantique dans la modélisation urbaine dans un contexte de calcul du point de vue, octobre 2014, Marie-Odile Berger, Gilles Simon.

PhD in progress: Jaime Garcia Guevara, Vers une utilisation clinique de la réalité agmentée pour la chirurgie hépatique, octobre 2015, Marie-Odile Berger, Stéphane Cotin (MIMESIS).

PhD in progress: Raffaella Trivisonne, Image-guided real-time simulation using stochastic filtering, novembre 2015, Erwan Kerrien, Stéphane Cotin (MIMESIS).

PhD in progress: Vincent Gaudillière, Reconnaissance de lieux et d'objets pour la réalité augmentée en milieux complexes, décembre 2016, Marie-Odile Berger, Gilles Simon.

### 9.2.3. *Juries*

Marie-Odile Berger was external reviewer of the PhD of A. Bauer and A. Agustinos and of the HDR of R. Grompone. Gilles Simon was a member of the PhD committee of Liming Yang.

## 9.3. Popularization

Members of the team participate on a regular basis, to scientific awareness and mediation actions.

- Marie-Odile Berger and Gilles Simon wrote an article about augmented reality in *Interstices* [27].
- Erwan Kerrien is Chargé de Mission for scientific mediation at Inria Nancy-Grand Est. As such, he is a member of the steering committee of "la Maison pour la Science de Lorraine"<sup>0</sup>, and member of the IREM<sup>0</sup> steering council. He also serves as the academic referent of an IREM working group aiming at introducing computer science in middle and high school curricula. Among other activities, he was also an associate researcher to a MATH.en.JEANS workshop, and he participated in the creation of a MOOC for teachers of the new ICN option (Informatique et Création Numérique - *Computer Science and Digital Creation*) at the beginning of high school curriculum.
- Gilles Simon participated to the "Fête de la science" (unplugged activities in computer science).
- Pierre-Frédéric Villard participated to open days and science festival in the IUT of Saint-Dié des Vosges. He presented augmented and virtual reality demos and their link to the high school mathematics program.
- Pierre-Frédéric Villard has been involved in the conception of the virtual visit for the Homo Numericus Exhibition (<http://homonumericus.inria.fr>).

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<sup>0</sup>"Houses for Science" project, see <http://maisons-pour-la-science.org/en>

<sup>0</sup>Institut de Recherche sur l'Enseignement des Mathématiques - *Research Institute for Teaching Mathematics*

## MORPHEO Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Selection

#### 10.1.1.1. Chair of Conference Program Committees

- Edmond Boyer was area chair for CVPR 2016 and BMVC 2016.

#### 10.1.1.2. Member of the Conference Program Committees

- Franck Hétroy-Wheeler was part of the IPC for Eurographics 2016 (short papers).
- Stefanie Wuhrer was PC member for the Eurographics Workshop 3DOR

#### 10.1.1.3. Reviewer

- Edmond Boyer has reviewed for: ECCV 2016, SIGGRAPH 2016, 3DV 2016, RFIA 2016, ORASIS 2015.
- Jean-Sébastien Franco has reviewed for: ECCV 2016, SIGGRAPH 2016, 3DV 2016, RFIA 2016
- Franck Hétroy-Wheeler has reviewed for: Eurographics 2016 (short papers), 3DV 2016.
- Stefanie Wuhrer has reviewed for CVPR 2016 and ECCV 2016

### 10.1.2. Journal

#### 10.1.2.1. Member of the Editorial Boards

- Edmond Boyer is associate editor of IJCV.

#### 10.1.2.2. Reviewer - Reviewing Activities

- Edmond Boyer has reviewed for: IEEE Transactions on PAMI.
- Franck Hétroy-Wheeler has reviewed for: Journal of Mathematical Imaging and Vision, The Visual Computer, Journal of Imaging.
- Julien Pansiot has reviewed for: MobiHealth 2016, J. 3D Research 2016, IOP SMS 2016, TPAMI 2016, IJCV 2016.

### 10.1.3. Invited Talks

- Edmond Boyer gave invited talks at: CVPR area chair meeting and ETH Zurich.

### 10.1.4. Scientific Expertise

- Edmond Boyer evaluated projects for: EPSRC (UK's agency for funding research) and FWF (Austrian Science Fund agency).

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

Master: Edmond Boyer, 3D Modeling, 18h, M2R GVR, Université Joseph Fourier Grenoble.

Master: Edmond Boyer, Introduction to Visual Computing, 30h, M1 MoSig, Université Joseph Fourier Grenoble.

Master: J.S. Franco, co-responsability of the Graphics, Vision, Robotics specialty of the Mosig Masters program, Second year Masters, Grenoble INP, Université Joseph Fourier.

Licence: F. Hétroy-Wheeler, Algorithmics and data structures, 59h, Ensimag 1st year, Grenoble INP.



Licence: F. Hétroy-Wheeler, Algorithmics and programming, 45h, Ensimag dual education through apprenticeship 1st year, Grenoble INP.

Master: F. Hétroy-Wheeler, Image projects, 25h, Ensimag 2nd year, Grenoble INP.

Master: F. Hétroy-Wheeler, Surface modelling, 24h, Ensimag 3rd year, Grenoble INP.

Master: F. Hétroy-Wheeler, 3D graphics, 11h, Master of Science in Informatics, Université Grenoble Alpes.

Master: F. Hétroy-Wheeler, Geometric modelling, 42h, Master of Science in Industrial and Applied Mathematics, Université Grenoble Alpes.

Master: F. Hétroy-Wheeler, co-responsability of the Mathematical Modeling, Image and Simulation (MMIS) track of Ensimag, Grenoble INP.

Master: J. Pansiot, Introduction to Computer Vision, 27h, Ensimag 3rd year, Grenoble INP.

Master: S. Wuhrer, 3D graphics, 13h, Master of Science in Informatics, Université Grenoble Alpes.

### 10.2.2. Supervision

PhD in progress : Benjamin Allain, Geometry and Appearance Analysis of Deformable 3D shapes, Université de Grenoble Alpes, started 01/10/2012, supervised by J.S. Franco and E. Boyer.

PhD in progress :Victoria Fernandez Abrevaya, 3D Dynamic Human Motion Representations, Université de Grenoble Alpes, started 01/10/2016, supervised by Stefanie Wuhrer and Edmond Boyer.

PhD: Timo Bolkart, Statistical analysis of 3D human faces in motion, Saarland University, started 01/01/2012, defended 14/06/2016, supervised by Stefanie Wuhrer.

PhD in progress: Adnane Boukhayma, 4D model synthesis, Université de Grenoble Alpes, started 01/10/2013, supervised by Edmond Boyer.

PhD in progress : Vincent Leroy, 4D Multi-View Reconstruction from Photometric Information, Université de Grenoble, started 01/10/2015, supervised by J.S. Franco and E. Boyer.

PhD: Georges Nader, Calcul du seuil de visibilité d'une distorsion géométrique locale sur un maillage et ses applications, Université Claude Bernard - Lyon 1, defended 22/11/2016, supervised by Florent Dupont, Kai Wang and Franck Hétroy-Wheeler.

PhD in progress: Romain Rombourg, Digital tree: from the acquisition to a high-level geometric model, Université Grenoble Alpes, started 01/10/2015, supervised by Franck Hétroy-Wheeler and Eric Casella.

PhD in progress: Aurela Shehu, Geometric processing of near-isometrically deforming surfaces, Saarland University, started 01/04/2012, defended 14/06/2016, supervised by Stefanie Wuhrer.

PhD : Vagia Tsiminaki, Appearance Modelling and Time Refinement in 3D Videos, Université de Grenoble Alpes, started 01/10/2012, defended 14/12/2016, supervised by J.S. Franco and E. Boyer.

PhD in progress: Li Wang, Transport optimal pour l'analyse de formes en mouvement, Université de Grenoble Alpes, started 01/10/2013, supervised by Edmond Boyer and Franck Hétroy-Wheeler.

PhD in progress : Jinlong Yang, Learning shape spaces of dressed 3D human models in motion, Université de Grenoble Alpes, started 01/10/2015, supervised by Franck Hétroy-Wheeler and Stefanie Wuhrer.

### 10.2.3. Juries

- Edmond Boyer was reviewer of the PhD thesis of: Ludovic Blache (université de Reims Champagne Ardenne), Timo Bolkart (Saarland University) and Vincent Jantet (ETH Zurich).
- Franck Hétroy-Wheeler is a member of the PhD monitoring committee of Van Tho Nguyen (University of Lorraine, INRA Nancy and Office National des Forêts).

## 10.3. Popularization

Morpheo members have demonstrated the Kinovis platform to the general public on numerous occasions, and most notably for the "Fête de la Science".

## PERCEPTION Project-Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Journal

#### 9.1.1.1. Member of the Editorial Boards

Radu Horaud is a member of the following editorial boards:

- advisory board member of the *International Journal of Robotics Research*, Sage,
- associate editor of the *International Journal of Computer Vision*, Kluwer, and
- area editor of *Computer Vision and Image Understanding*, Elsevier.

### 9.1.2. Invited Talks

- Xavier Alameda-Pineda gave invited talks Polytechnic University of Catalunya (May, Barcelona), Telecom ParisTech (May), Columbia University (June, New York, USA), and Carnegie Mellon University (June, Pittsburgh, USA).
- Radu Horaud gave invited talks at the Working Group on Model Based Clustering (July, Paris), at Google Research (July, Mountain View, USA), SRI International (July, Menlo Park, USA), and Amazon (July, Seattle, USA).

## 9.2. Teaching - Supervision - Juries

### 9.2.1. Teaching

**Tutorial:** *Multimodal Human Behaviour Analysis in the Wild: Recent Advances and Open Problems* at the IEEE ICPR'16 Conference, December 2016, 4 hours. Teachers: Xavier Alameda-Pineda, Nicu Sebe and Elisa Ricci (University of Trento).

### 9.2.2. Supervision

PhD in progress: Israel Dejene Gebru, October 2013, Radu Horaud and Xavier Alameda-Pineda.

PhD in progress: Dionyssos Kounades-Bastian, October 2013, Radu Horaud, Laurent Girin, and Xavier Alameda-Pineda.

PhD in progress: Vincent Drouard, October 2014, Radu Horaud and Sileye Ba.

PhD in progress: Benoit Massé, October 2014, Radu Horaud and Sileye Ba.

PhD in progress: Stéphane Lathuilière, October 2014, Radu Horaud.

PhD in progress: Yutong Ban, October 2015, Radu Horaud and Laurent Girin

## SIROCCO Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. Member of Organizing Committees

- C. Guillemot has served as area chair for the European Signal Processing Conference (EUSIPCO), 2016.
- C. Guillemot co-organized (together with Joachim Weickert, Prof. Universität des Saarlandes, and Thomas Pock, Prof. TU Graz, and Gerlind Plonka-Hoch, Prof. Universität Göttingen) a Schloss Dagstuhl seminar on inpainting-based image compression (Nov. 13-18, 2016).

#### 10.1.1.2. Chair of Conference Program Committees

- C. Guillemot was technical co-chair of the IEEE image, video and multi-dimensional signal processing workshop, 11-12 July 2016
- C. Guillemot was general co-chair of the IEEE International workshop on Multimedia Signal Processing (IEEE-MMSP), Montreal, 21-23 Sept. 2016.

#### 10.1.1.3. Member of Conference Program Committees

- O. Le Meur has been a member of technical program committees of international conferences: EUVIP 2016, QoMEX 2016
- A. Roumy has been a member of the technical program committee of the ACCV 2016 workshop on New Trends in Image Restoration and Enhancement.

### 10.1.2. Journal

#### 10.1.2.1. Member of the Editorial Boards

- C. Guillemot has been associate editor of the Eurasip International Journal on Image Communication (2010-2016).
- C. Guillemot is senior area editor of the IEEE Trans. on Image Processing.
- C. Guillemot is associate editor of the International Journal on Mathematical Imaging and Vision.
- O. Le Meur is member of the editorial board of the IET Image Processing Journal.
- T. Maugey has been Guest editor for the Special Issue on Interactive Multi-view Video Services: from acquisition to Rendering, IEEE Multimedia Communication Technical Committee letters, Vol. 11(2), March 2016 (Guest Editors: Erhan Ekmekcioglu, Thomas Maugey, Laura Toni)
- A. Roumy is associate editor of the Springer Annals of Telecommunications.

### 10.1.3. Invited Talks

- O. Le Meur has been invited for a talk at Harmonic (Rennes) on “Computational Modelling of visual attention”
- O. Le Meur participated to the TechnoConference at Inria. The presentation dealt with spatio-temporal video inpainting.
- T. Maugey has been invited for a talk at I3S (Nice, France) on “Enabling user to interactively select viewpoint : a challenge for 3D data compression ”, May 2016.
- C. Guillemot gave an overview talk on image compression at the Dagstuhl seminar (13-18 Nov. 2016).

#### **10.1.4. Leadership within the Scientific Community**

- C. Guillemot is member of the IEEE IVMSP technical committee
- C. Guillemot is senior member of the steering committee of IEEE Trans. on Multimedia (2016-2018).

#### **10.1.5. Scientific Expertise**

- C. Guillemot is member as scientific expert of the CCRRDT (Regional Committee of Research and Technological Development) of the Brittany region.

#### **10.1.6. Research Administration**

- C. Guillemot has been (Sept. 2015-Dec. 2016) vice-chair of Inria's evaluation committee.
- C. Guillemot is member of the "bureau du Comité des Projets".
- T. Maugey has been member of the selection committee for the assignment of the ministerial PhD grants at IRISA.
- A. Roumy served as a member of Board of Examiners (Comité de sélection) for an Associate Professor position (Maitre de Conférences) at CREATIS Polytech Lyon (MCU61-46 2016).
- A. Roumy served as a member of Board of Examiners (Comité de sélection) for an Associate Professor position (Maitre de Conférences) at ENSEIRB-MATMECA Bordeaux (MCF61-0127 2016).
- A. Roumy is a member of the Inria Joint Administrative Committee (CAP commission administrative paritaire).

## **10.2. Teaching - Supervision - Juries**

### **10.2.1. Teaching**

Master: C. Guillemot, Image and video compression, 8 hours, M2 computer science, Univ. of Rennes 1, France.

Master: C. Guillemot, Image and video compression, 8 hours, M2 SISEA, Univ. of Rennes 1, France.

Master: O. Le Meur, Selective visual attention, 6 hours, M2, Univ. of Paris 8, France.

Master: O. Le Meur, Acquisition/Image Processing/Compression, 22 hours, M2 MITIC, Univ. of Rennes 1, France.

Engineer degree: O. Le Meur, Image Processing, video analysis and compression, 54 hours, ESIR2, Univ. of Rennes 1, France.

Engineer degree: O. Le Meur, Visual communication, 65 hours, ESIR3, Univ. of Rennes 1, France.

Professional training: O. Le Meur, Image Processing and OpenCV, 42 hours, Technicolor Rennes.

Engineering degree: A. Roumy, Compressive sensing, 17 hours, INSA Rennes, 5th year, Mathematical engineering, France.

Master: A. Roumy, Compressive sensing, 15 hours, ENSAI Bruz, Master Big Data, France.

### **10.2.2. Supervision of PhD defended during the year**

PhD-VAE: P. Bordes, Adapting video compression to new formats, Univ. of Rennes 1, 18 Jan. 2016, C. Guillemot.

PhD : M. Le Pendu, Backward compatible approaches for the compression of high dynamic range videos, Univ. of Rennes 1, 17 March 2016, C. Guillemot (Cifre contract with Technicolor).

PhD : J. C. Ferreira, Algorithms for Super-resolution of Images based on Sparse Representation and Manifolds, co-tutelle Univ. of Rennes 1/ University of Uberlandia Brazil, 6 July 2016, C. Guillemot.

PhD: C. Chamaret, Color Harmony: experimental and computational modeling, University of Rennes 1, 28th of April, 2016.

### **10.2.3. Juries**

- C. Guillemot has been member (rapporteur) of the PhD jury of:
  - T. Biatek, INSA-Rennes, Apr. 2016
  - A. Akl, Univ. of Bordeaux, Feb. 2016
- C. Guillemot has been member of the PhD jury of:
  - A. Gilles, INSA-Rennes, Sept. 2016
  - L. LE Magoarou, Univ. Rennes 1, Nov. 2016
- O. Le Meur has been member (rapporteur) of the jury of the PhD committee of:
  - Romain Cohendet, University Bretagne Loire, IRCCyN, 2016
  - Andrea Helo, University Paris Descartes, 2016
  - Ala Aboudib, Telecom Bretagne, 2016
  - Franck Chi, Telecom Bretagne, 2016

## STARS Project-Team

# 9. Dissemination

## 9.1. Promoting Scientific Activities

### 9.1.1. Scientific events organisation

#### 9.1.1.1. General chair, scientific chair

François Brémond was organizer of the ISG 2016, 10th World Conference of Gerontechnology, Nice, 28th to 30th September 2016.

François Brémond was editor of the Crowd Understanding workshop, part of ECCV, Amsterdam, October 2016.

#### 9.1.1.2. Member of the organizing committee

François Brémond was a member of the Management Committee and COST Action IC1307 in 2016.

### 9.1.2. Scientific events selection

#### 9.1.2.1. Member of the conference program committees

François Brémond was program committee member of the conferences and workshops: KSE 2016, PETS2016, MMM2017.

François Brémond was ACM Multimedia Area Chair for Multimedia and Vision, Amsterdam, 2016.

François Brémond was session chair of AVSS-16, Colorado Springs, USA, 2016.

Jean-Paul Rigault is a member of the *Association Internationale pour les Technologies à Objets* (AITO) which organizes international conferences such as ECOOP.

Antitza Dantcheva was program committee member of the conference International Conference on Biometrics (ICB 2016), the CVPR Workshop ChaLearn Looking at People 2016 and the Healthcare Conference Workshop within the EAI International Conference on Pervasive Computing Technologies.

#### 9.1.2.2. Reviewer

François Brémond was reviewer for the conferences : CVPR2016-7, ECCV2016, VOT2016, MARM2016, WACV 2017.

Carlos Fernando Crispim Junior was reviewer for the conferences: International Conference on Intelligent Robot and Systems, IEEE International Conference on Robotics and Automaton, Brazilian Conference in Biomedical Engineering, AMBIANT Conference, Computer on the Beach.

### 9.1.3. Journal

#### 9.1.3.1. Member of the editorial boards

François Brémond was handling editor of the international journal "SDECLARE Machine Vision and Application".

#### 9.1.3.2. Reviewer - Reviewing activities

François Brémond was reviewer for the journal *Revue Retraite et société* and *Medical Engineering & Physics*.

Carlos Fernando Crispim Junior was reviewer for the journals: *Pattern Recognition*, *Neurocomputing*, *Computer Vision and Image Understanding Journal*, *Computers in Biology and Medicine Journal*, *PLOS One Journal*, *Frontiers in Neuroscience*, *Sensors*.

Antitza Dantcheva reviewed for the journals: IEEE Transactions on Information Forensics and Security (TIFS), Information Processing Letters, The Computer Journal, IET Biometrics, Multimedia Systems, International Journal for Information Management, Information Fusion (INFFUS), Sensors, Pattern Recognition.

#### **9.1.4. Invited talks**

François Brémond was invited by Prof. Ram Nevatia to give a talk on research initiatives and new directions in Video Understanding, USC, LA, USA 17 August 2016.

François Brémond was invited by Prof. Jonathan Ventura to give a talk on People detection, at the SLDP 2016 workshop of AVSS, Colorado Springs, USA, 23 August 2016.

François Brémond was invited by Prof. William Robson Schwartz, Department of Computer Science, Federal University of Minas Gerais to give a talk on Video Analytic, at Video Surveillance workshop in Belo Horizonte-Brazil, 03 October 2016.

François Brémond was invited by Prof. William Robson Schwartz to give a talk on People Tracking, at SIBGRAPI 2016, Sao Paulo-Brazil, 05 October 2016.

François Brémond was invited by Prof. Cosimo Distanto, Consiglio Nazionale delle Ricerche to give a talk on Activity Recognition, at ACIVS 2016, Lecce, Italy, 26 October 2016.

François Brémond was invited by Sebastien Ambellouis (IFSTTAR) to give a talk on Activity Monitoring, at IEEE IPAS 2016, Hammamet, Tunisia, 5-7 November 2016.

Carlos Fernando Crispim Junior was invited to give a talk at the 1st Inter-lalex seminar "Smart Systems", Besançon, France, November 23rd 2016.

Carlos Fernando Crispim Junior was invited to make a presentation at PSI-VISICS seminar at ESAT department in KU Leuven University, October 24th 2016.

Carlos Fernando Crispim Junior was invited to make a presentation at Machine Learning seminar at Computer Science department of KU Leuven University, October 17th 2016.

Carlos Fernando Crispim Junior was invited to give a talk at ISG 2016 - Seminar European FP7 project Dem@care: Automatic Video Analysis for Diagnosis and Care, Nice, France, October 29th 2016.

Carlos Fernando Crispim Junior was invited speaker at the internal seminar of LAAS-CNRS, Toulouse, France, July 3rd-4th.

Carlos Fernando Crispim Junior was invited speaker at CPUDEX seminar, LABRI-CNRS, Bordeaux, France, February 2016.

#### **9.1.5. Scientific expertise**

François Brémond was expert for EU European Reference Network for Critical Infrastructure Protection (ERNICIP) - Video Analytics and surveillance Group, at European Commission's Joint Research Centre in Brussels in July 2016.

François Brémond was expert for the Foundation Médéric Alzheimer, for the doctoral fellowship selection, September 2016.

## **9.2. Teaching - Supervision - Juries**

### **9.2.1. Teaching**

Master : Annie Ressouche, Safety in Middleware for Internet of Things, 10h, niveau (M2), Polytech Nice School of Nice University.

Jean-Paul Rigault is Full Professor of Computer Science at Polytech'Nice (University of Nice): courses on C++ (beginners and advanced), C, System Programming, Software Modeling.

### **9.2.2. Supervision**

PhD in progress : Auriane Gros, Evaluation and Specific Management of Emotionnal Disturbances with Activity Recognition Systems for Alzheimer patient, Sept 2014, François Brémont.

PhD in progress : Minh Khue Phan Tran, Man-machine interaction for older adults with dementia, May 2013, François Brémont.

PhD in progress : Michal Koperski, Detecting critical human activities using RGB/RGBD cameras in home environment, François Brémont.

PhD in progress : Thi Lan Anh Nguyen, Complex Activity Recognition from 3D sensors, Dec 2014, François Brémont.

PhD in progress : Ines Sarray, Activity Recognition System Design, Oct 2015, Sabine Moisan.

PhD in progress : Farhood Negin, People Detection for Activity Recognition using RGB-Depth Sensors, Jan 2015, François Brémont.

PhD in progress : Ujjwal Ujjwal, Pedestrian Detection to Dynamically Populate the Map of a Crossroad, Sep 2016, François Brémont.

### 9.2.3. *Juries*

François Brémont was jury member of the following PhD theses:

PhD, Andrei Stoian, CNAM, Paris, 15 January 2016.

PhD, Romain Endelin, University of Montpellier, 2nd June 2016.

PhD, Jean-Charles Bricola, CMM, Mines ParisTech, Fontainebleau, 19 October 2016.

PhD, Salma Moujtahid, LIRIS-Equipe IMAGINE-INSA Lyon, 3 November 2016.

PhD, Marion Chevalier, Laboratoire d'Informatique de Paris 6, Thales Optronique S.A.S., Paris, 2 December 2016.

## 9.3. Popularization

François Brémont was invited to give a talk at Conférence des métiers at International Lycée (CIV) in Sophia, January 2016.

François Brémont was interviewed by the agence Citizen Press February 2016.

François Brémont was invited to give a talk at the Artificial Intelligence Workshop Meeting Amadeus - Inria, June 2016.

François Brémont was invited to give a talk at la rencontre Inria Industrie Ed-Tech, 1 December 2016.

François Brémont has published an article in ERCIM news, December 2016.



## THOTH Project-Team

# 10. Dissemination

## 10.1. Promoting Scientific Activities

### 10.1.1. Scientific Events Organisation

#### 10.1.1.1. Member of the Organizing Committees

- G. Rogez. Co-organizer of the CVPR workshop on Observing and Understanding Hands in Action (HANDS 2016).
- J. Verbeek. Organized Symposium on Computer Vision and Deep Learning on June 9th in Grenoble with around 80 attendants.

### 10.1.2. Scientific Events Selection

#### 10.1.2.1. Member of the Conference Program Committees

- C. Schmid: area chair for ECCV'16, ICCV'17.
- J. Mairal: area chair for CVPR 2016, ECCV 2016, ICLR 2016 and NIPS 2016.
- J. Verbeek: tutorial chair for ECCV'16.

#### 10.1.2.2. Reviewer

The permanent members of the team reviewed numerous papers for numerous international conferences in computer vision and machine learning: CVPR, ECCV, NIPS, ICML, AISTATS.

### 10.1.3. Journal

#### 10.1.3.1. Member of the Editorial Boards

- C. Schmid: Editor in Chief of the International Journal of Computer Vision, since 2013.
- C. Schmid: Associate editor for Foundations and Trends in Computer Graphics and Vision, since 2005.
- J. Verbeek: Associate editor for Image and Vision Computing Journal, since 2011.
- J. Verbeek: Associate editor for the International Journal on Computer Vision, since 2014.
- J. Mairal: Associate editor of the International Journal of Computer Vision (IJCV), since 2015.
- J. Mairal: Senior associate editor for IEEE Signal Processing Letters, since Feb 2015 (editor since Aug. 2014).
- J. Mairal: Associate editor of Journal of Mathematical Imaging and Vision (JMIV), since 2015.

#### 10.1.3.2. Reviewer - Reviewing Activities

The permanent members of the team reviewed numerous papers for numerous international journals in computer vision (IJCV, PAMI,CVIU), machine learning (JMLR, Machine Learning). Some of them are also reviewing for journals in optimization (SIAM Journal on Optimization, Mathematical Programming), image processing (SIAM Imaging Science).

#### 10.1.4. Invited Talks

- C. Schmid. Invited speaker at Large-scale Computer Vision Workshop in conjunction with NIPS'16, December 2016.
- C. Schmid. Keynote speaker at IEEE International Conference on Image Processing, Phoenix, September 2016.
- C. Schmid. Invited speaker at Robust Features Workshop in conjunction with CVPR'16, June 2016.
- C. Schmid. Invited speaker at collège de France seminar (chair of Yann LeCun), Mars 2016.
- C. Schmid. Invited speaker at the LIG (laboratoire d'informatique de Grenoble) keynote talks, February 2016.
- C. Schmid. Seminar at Google, Mountain View, July 2016.
- C. Schmid. Seminar at "journées scientifiques Inria", June 2016.
- C. Schmid. Seminar at Karlsruhe Technology Institute, June 2016.
- C. Schmid. Seminar at MPI, Tübingen, April 2016.
- C. Schmid. Seminar at INSA Lyon, April 2016.
- C. Schmid. Seminar at New York University, January 2016.
- J. Verbeek. Invited speaker at NVIDIA GPU Technology Conference, Amsterdam, The Netherlands. September 2016.
- J. Verbeek. Seminar GREYC, University of Caen, France, December 2016.
- J. Verbeek. Seminar PSI team, department of Electrical Engineering (ESAT), University of Leuven, Belgium, October 2016.
- J. Mairal. Invited talk at the Dagstuhl seminar "New Directions for Learning with Kernels and Gaussian Processes", December 2016.
- J. Mairal. Invited talk at workshop Phi-Tab, Telecom ParisTech, November 2016.
- J. Mairal. Invited talk at Journées GDR-Isis, Telecom ParisTech, September 2016.
- J. Mairal. Invited talk at Journées MAS, Grenoble, France, August 2016.
- J. Mairal. Invited talk at ICCOPT, Tokyo, Japan, August 2016.
- J. Mairal. Seminar at UC Berkeley, EECS department, USA, March 2016.
- J. Mairal. Seminar at UBC Vancouver, Canada, February 2016.
- J. Mairal. Invited talk at the MIA'16 workshop, Paris, France, January 2016.
- K. Alahari. Seminar at Carnegie Mellon University, USA, July 2016.
- K. Alahari. invited talk at Mysore Park workshop on vision, language and AI, India, December 2016.
- G. Rogez. Invited talk at Journées CNRS-GDR Isis, Telecom Paris, May 2016.
- G. Rogez. Invited speaker at CVPR Tutorial on First-person Visual Sensing: Theory, Models, and Application, Las Vegas, June 2016.
- G. Rogez. Seminar at LIRMM, Université de Montpellier, December 2016.
- H. Lin. Seminar at New York University, USA, April 2016.
- H. Lin. Seminar at Princeton University, USA, April 2016.
- H. Lin. Invited talk at ICCOPT, Tokyo, Japan, August 2016.

#### 10.1.5. Scientific Expertise

- C. Schmid is member of the PAMI-TC awards committee, and the PAMI-TC executive committee.
- K. Alahari: reviewer for National Sciences and Engineering Research Council of Canada (NSERC), Canada, Agence Nationale de la Recherche (ANR), and Icelandic Research Fund (IRF), Iceland.

- J. Mairal: reviewer for ANR.

### 10.1.6. Research Administration

- C. Schmid is member of the “comité d’orientations scientifiques”. Inria Grenoble, 2016.

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

Doctorat: C. Schmid, Tutorial on action recognition at the Winter School in Computer Vision, Jerusalem, January 2017.

Doctorat: J. Mairal, Lecturer at the summer school MAESTRA, Ohrid, Macedonia.

Master : C. Schmid, “Object recognition and computer vision”, 9H eqTD, M2, ENS Cachan, France.

Master : J. Verbeek and C. Schmid. “Machine Learning & Category Representation”, 27H eqTD, M2, Univ. Grenoble.

Master : J. Verbeek and J. Mairal, “Kernel Methods for Statistical Learning”, 27H eqTD, M2, ENSIMAG, Grenoble.

Master: J. Mairal, “Kernel methods for statistical learning”, 27H eqTD, M2, Ecole Normale Supérieure, Cachan.

Master: J. Mairal, “Introduction to sparse estimation”, 6H eq-TD, M2, PSL-ITI, France.

Master: K. Alahari, “Introduction to Discrete Optimization”, Ecole Centrale Paris, 27H eq-TD, M1, Paris, France.

Master: K. Alahari, “Understanding Big Visual Data”, Grenoble INP, 13.5H eq-TD, M2, Grenoble, France.

Licence: P. Weinzaepfel, “Introduction à UNIX et à la programmation en langage C”, 67.5H TD, L1, DLST Grenoble.

### 10.2.2. Supervision

PhD: P. Weinzaepfel, Motion in action : optical flow estimation and action localization in videos, supervision 50% C. Schmid and 50% Z. Harchaoui, September 2016.

PhD: Y. Hua, Towards robust visual object tracking : proposal selection and occlusion reasoning, supervision 50% C. Schmid and 50% K. Alahari, June 2016.

PhD: A. Mishra, Understanding Text in Scene Images, supervision 50% K. Alahari and 50% Prof. C. V. Jawahar, November 2016.

PhD: P. Bojanowski, Learning to annotate dynamic video scenes, supervision 20% with J. Ponce, I. Laptev and J. Sivic, June 2016.

PhD: S. Saxena, Learning representations for visual recognition, supervision 95% J. Verbeek and 5% C. Schmid, December 2016.

### 10.2.3. Juries

C. Schmid: Pedro Oliveira Pinheiro, January 2017, rapporteur, these, EPFL.

C. Schmid: Makarand Tapaswi, June 2016, rapporteur, these, KIT Karlsruhe.

C. Schmid: Natalia Neverova, avril 2016, president, these, INSA Lyon.

K. Alahari: Guillaume Seguin, 2016, examinateur, these, Ecole Normale Supérieure, Paris, France.

G. Rogez. Marta Salas, 2016, rapporteur, these, Universidad de Zaragoza, Spain.

G. Rogez. Tu-Hoa Pham, December 2016, examinateur, these, Univ. Montpellier.

J. Verbeek. Amir Ghodrati, October 2016, rapporteur, these, Univ. Leuven.

J. Verbeek. Binod Bhattarai, December 2016, rapporteur, these, Univ. Caen.

## **WILLOW Project-Team**

# **10. Dissemination**

## **10.1. Promoting Scientific Activities**

### **10.1.1. Scientific Events Organisation**

#### *10.1.1.1. General Chair, Scientific Chair*

- I. Laptev will be program co-chair of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018.

#### *10.1.1.2. Member of the Organizing Committees*

- M. Trager is an organizer of "Minisymposium" on "Algebraic Vision" at the SIAM conference on Applied Algebraic Geometry (Atlanta, July 31st-August 4th 2017).

### **10.1.2. Scientific Events Selection**

#### *10.1.2.1. Area chairs*

- IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016 (I. Laptev).
- Asian Conference on Computer Vision (ACCV), 2016 (I. Laptev).
- International Conference on Computer Vision (ICCV), 2017 (J. Sivic).

#### *10.1.2.2. Member of the Conference Program Committees*

- IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016 (R. Arandjelovic, A. Bursuc, P. Bojanowski, M. Cho, J. Sivic, G. Cheron).
- European Conference on Computer Vision (ECCV), 2016 (R. Arandjelovic, A. Bursuc, P. Bojanowski, G. Cheron, M. Cho, S. Kwak, J. Sivic, G. Cheron, I. Laptev).
- International Conference on Learning Representations, 2016 (J. Sivic).

### **10.1.3. Journals**

#### *10.1.3.1. Member of the editorial board*

- International Journal of Computer Vision (I. Laptev, J. Ponce, J. Sivic).
- IEEE Transactions on Pattern Analysis and Machine Intelligence (I. Laptev, J. Sivic).
- Foundations and Trends in Computer Graphics and Vision (J. Ponce).
- I. Laptev and J. Sivic co-edit a special issue on "Video representations for visual recognition" in the International Journal of Computer Vision.
- J. Sivic co-edits a special issue on "Advances in Large-Scale Media Geo-Localization" in the International Journal of Computer Vision.

#### *10.1.3.2. Reviewer*

- International Journal of Computer Vision (M. Cho, G. Cheron, R. Arandjelovic).
- IEEE Transactions on Pattern Analysis and Machine Intelligence (R. Arandjelovic, P. Bojanowski, M. Cho, S. Kwak, G. Cheron, A. Bursuc).
- IEEE Transactions on Circuits and Systems for Video Technology (P. Bojanowski, B. Ham).
- IEEE Transactions on Image Processing (B. Ham).
- IEEE Signal Processing Letters (B. Ham).
- Computer Vision and Image Understanding (M. Cho, A. Bursuc).
- Elsevier Neurocomputing (B. Ham).

- EURASIP Journal on Image and Video Processing (B. Ham).

#### **10.1.4. Others**

- J. Sivic is senior fellow of the Neural Computation and Adaptive Perception program of the Canadian Institute of Advanced Research.
- R. Arandjelovic and J. Sivic obtained the outstanding reviewer award at IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016.

#### **10.1.5. Invited Talks**

- V. Kantorov, Speaker at Second Christmas Colloquium on Computer Vision (December 2016, Moscow, SkolTech).
- I. Laptev, Invited talk, MailRu, Moscow, May 2016.
- I. Laptev, Invited talk, Skolkovo Robotics, Moscow, May 2016.
- I. Laptev, Invited talk, Deep Machine Intelligence and its Applications, SkolTech, Moscow, June 2016.
- I. Laptev, Invited talk, MSR-Inria Offsite Meeting, Paris, September, 2016.
- I. Laptev, Invited talk, University of Central Florida, Orlando, September, 2016.
- I. Laptev, Invited talk, Georgia Institute of Technology, Atlanta, September, 2016.
- I. Laptev, Invited talk, ECCV'16 Workshop on Brave new ideas for motion representations in videos, Amsterdam, October, 2016.
- I. Laptev, Invited talk, Open Day AI Innovation Factory, December, 2016.
- J. Ponce, Invited talk, New York University, January 2016.
- J. Ponce, Invited talk, Université Marne la Vallée, Mars 2016.
- J. Ponce, Invited talk, Workshop on Algebraic Vision, San Jose, May 2016.
- J. Ponce, Invited talk, Colloque LORIA, Nancy, May 2016.
- J. Ponce, Invited talk, Parthenos Workshop, Bordeaux, November 2016.
- J. Sivic, seminar, UC Berkeley, May, December, 2016.
- J. Sivic, invited talk, Brno University of Technology, April 2016.
- J. Sivic, Invited talk, the CIFAR workshop, Barcelona, December 2016.
- J. Sivic, Invited talk, Colloquium on Perspectives and New Challenges in Data Science, Ecole de Ponts ParisTech, 2016.
- M. Trager, invited speaker, AIM workshop "Algebraic Vision" (San Jose, May 2-6, 2016).

#### **10.1.6. Leadership within the Scientific Community**

- Member, advisory board, IBM Watson AI Xprize (J. Ponce).
- Member, steering committee, "France Intelligence Artificielle" initiative (J. Ponce).
- Member, advisory board, Computer Vision Foundation (J. Sivic).

#### **10.1.7. Scientific Expertise**

- J. Sivic gave an overview of state-of-the-art in computer vision at the seminar on artificial intelligence, Direction Generale des Entreprises (DGE) du Ministere de l'Economie, de l'Industrie et du Numerique, September, 2016.

#### **10.1.8. Research Administration**

- Member, Bureau du comité des projets, Inria, Paris (J. Ponce)
- Director, Department of Computer Science, Ecole normale supérieure (J. Ponce)
- Member, Scientific academic council, PSL Research University (J. Ponce)

- Member, Research representative committee, PSL Research University (J. Ponce).
- Member of Inria Commission de developpement technologique (CDT), 2012- (J. Sivic).
- Member of ANR evaluation committee (I. Laptev).

## 10.2. Teaching - Supervision - Juries

### 10.2.1. Teaching

- Master : J. Ponce, "Introduction to computer vision", M1, Ecole normale superieure, 36h.
- Master : I. Laptev, J. Ponce and J. Sivic (together with C. Schmid, Inria Grenoble), "Object recognition and computer vision", M2, Ecole normale superieure, and MVA, Ecole normale superieure de Cachan, 36h.
- Master : I. Laptev, J. Ponce and J. Sivic, Cours PSL-ITI - Informatique, mathematiques appliques pour le traitement du signal et l'imagerie, 20h.

### 10.2.2. Supervision

PhD : Piotr Bojanowski, "Learning to annotate dynamic video scenes", graduated in 2016, I. Laptev, J. Ponce, C. Schmid and J. Sivic.

PhD : Guillaume Seguin, "Person analysis in stereoscopic movies", graduated in 2016, I. Laptev and J. Sivic.

PhD in progress : Ignacio Rocco, "Estimating correspondence between images via convolutional neural networks", started in Jan 2017, J. Sivic, R. Arandjelovic (Google DeepMind).

PhD in progress : Antoine Miech, "Understanding long-term temporal structure of videos Phd thesis proposal", started in Oct 2016, I. Laptev, J. Sivic, P. Bojanowski (Facebook AI Research).

PhD in progress : Gul Varol, "Deep learning methods for video interpretation", started in Oct 2015, I. Laptev, C. Schmid.

PhD in progress : Julia Peyre, "Learning to reason about scenes from images and language", started in Oct 2015, C. Schmid, I. Laptev, J. Sivic.

PhD in progress : Jean-Baptiste Alayrac, "Structured learning from video and natural language", started in 2014, I. Laptev, J. Sivic and S. Lacoste-Julien (Inria SIERRA / U. Montreal).

PhD in progress : Rafael Sampaio de Rezende, started in 2013, J.Ponce.

PhD in progress : Guilhem Cheron, "Structured modeling and recognition of human actions in video", started in 2014, I. Laptev and C. Schmid.

PhD in progress : Theophile Dalens, "Learning to analyze and reconstruct architectural scenes", starting in Jan 2015, M. Aubry and J. Sivic.

PhD in progress : Vadim Kantorov, "Large-scale video mining and recognition", started in 2012, I. Laptev.

PhD in progress : Maxime Oquab, "Learning to annotate dynamic scenes with convolutional neural networks", started in Jan 2014, L. Bottou (Facebook AI Research), I. Laptev and J. Sivic.

PhD in progress : Matthew Trager, "Projective geometric models in vision", started in 2014, J. Ponce and M. Hebert (CMU).

PhD in progress : Tuang Hung VU, "Learning functional description of dynamic scenes", started in 2013, I. Laptev.

### 10.2.3. Juries

- PhD thesis committee:
  - Stavros Tsogkas, Ecole Centrale, France, 2016 (J. Sivic, examinateur).
  - Sesh Karri, Ecole Normale Superieure, France, 2016 (J. Sivic, examinateur).

- Elliot Crowley, University of Oxford, UK, 2016, (J. Sivic, external examiner)
- Olivier Frigo, Université Paris Descartes, France, 2016 (J. Sivic, rapporteur).
- Mattis Paulin, Inria Grenoble, France, 2017 (J. Sivic, rapporteur).
- Francesco Massa, ENPC, France 2017 (J. Sivic, examinateur).
- Philippe Weinzaepfel, Université Grenoble Alpes, France, 2015 (I. Laptev, rapporteur).
- Guillaume Seguin, Ecole Normale Supérieure, France, 2016 (I. Laptev, J.Ponce, J. Sivic, examinateurs).
- Piotr Bojanowski, Ecole Normale Supérieure, France, 2016 (I. Laptev, J.Ponce, J. Sivic, examinateurs).
- Ala Aboudib, Télécom Bretagne, France, 2016 (J. Ponce).
- Philippe Weinzaepfel, Université Grenoble Alpes, France, 2016 (J. Ponce).

### 10.3. Popularization

- Participation to the round table on "L'IA est-elle réservée aux GAFA", NUMA, June 2016 (J. Ponce).
- Participation to the round table on "Fictions, magie numérique et réalités", Post-digital program, ENS/PSL Research University, October 2016 (J. Ponce).
- Debate with Jacques Attali, "Intelligence Artificielle, science avec conscience?", "Intelligence Artificielle : de la technique au business" Conference, December 2016 (J. Ponce).
- Participation to the round table on AI, Liberté Living Lab, December 2016 (J. Ponce).
- Participation to the round table on ethics at the Senate's public hearing on Artificial Intelligence, January 2017 (J. Ponce).
- Interview on Nolife 56Kast ([https://www.youtube.com/watch?v=8UgH8\\_J2ugU](https://www.youtube.com/watch?v=8UgH8_J2ugU)) (J. Ponce).
- Interview in Le Monde ([http://www.lemonde.fr/pixels/article/2016/01/08/intelligence-artificielle-ce-que-voient-les-machines\\_4843858\\_4408996.html](http://www.lemonde.fr/pixels/article/2016/01/08/intelligence-artificielle-ce-que-voient-les-machines_4843858_4408996.html)) (J. Ponce).
- Interview in Télérama (<http://www.telerama.fr/monde/trouver-le-calme-reconstituer-palmyre-ou-choisir-un-traitement-grace-a-l-ia,141131.php>) (J. Ponce).