



RESEARCH CENTER
Lille - Nord Europe

FIELD

Activity Report 2014

Section Dissemination

Edition: 2015-03-24

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ATEAMS Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. General chair, scientific chair

- Jurgen Vinju: General Chair, The 7th International Conference on Software Language Engineering (SLE), Steering committee member SLE.

8.1.1.2. Member of the organizing committee

- Davy Landman: Web chair, The 7th International Conference on Software Language Engineering (SLE).
- Tijs van der Storm: Social Media Chair, The 7th International Conference on Software Language Engineering (SLE); co-organizer Belgium Netherlands Seminar on Software Evolution (BENEVOL'14), co-organizer Software Development Automation'14 (SDA'14).

8.1.2. Scientific events selection

8.1.2.1. Member of the conference program committee

- Paul Klint: WCRE/CSMR ERA 2014.
- Tijs van der Storm: SLE'14, DSLDI'14, SEMS'14, FTJP'14, TTC'14.
- Jurgen Vinju: WCRE/CSMR Tool track.

8.1.2.2. Reviewer

- Tijs van der Storm: PLDI'14.

8.1.3. Journal

8.1.3.1. Member of the editorial board

- Jan van Eijck: Editor of the Journal of Logics and their Applications.
- Paul Klint: Editor Science of Computer Programming, editor Springer LNCS Series on Services Science.
- Jurgen Vinju: co-editor ERCIM news, special issue on Software Quality.

8.1.3.2. Reviewer

- Jan van Eijck: Reviewer for ESSLLI, Journal of Semantics, Journal of Logic and Computation, Fundamenta Informaticae, Synthese, Journal of Philosophical Logic, Journal of Logic, Language and Information, Cambridge University Press.
- Tijs van der Storm: Journal of Software & Systems Modeling, Science of Computer Programming, Computer Languages, Computer Languages, Systems and Structures, Automated Software Engineering.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Master : Jan van Eijck, "Software Testing", 6 EC, Master Programme Software Engineering, Universiteit van Amsterdam, The Netherlands.

Master: Jan van Eijck, "Functional Specification of Algorithms", 6 EC, Master Programme Logic, Universiteit van Amsterdam, The Netherlands.

Master : Tijs van der Storm, “Software Construction”, 6 EC, Universiteit van Amsterdam, The Netherlands.

8.2.2. Supervision

PhD : Jeroen van den Bos, “Gathering Evidence: Model-Driven Software Engineering in Automated Digital Forensics”, Universiteit van Amsterdam, January, 9th, 2014, Paul Klint, Tijs van der Storm.

PhD in progress : Ali Afroozeh, “Advances in GLL Parsing”, 2012, Paul Klint, Jurgen Vinju.

PhD in progress : Pablo Inostroza Valdera, “Modularity in DSL development”, 2013, Paul Klint, Tijs van der Storm.

PhD in progress : Anastasia Izmaylova, “Language Parametric Refactoring”, 2011, Paul Klint, Jurgen Vinju.

PhD in progress : Atze van der Ploeg, “Efficient Abstractions for Visualization and Interaction”, 2011, Paul Klint, Tijs van der Storm.

PhD in progress : Riemer van Rozen, “Model-Driven Game Development”, 2013, Paul Klint, Tijs van der Storm.

PhD in progress : Michael Steindorfer, “Efficient Data Structures for Meta Programming”, 2012, Paul Klint, Jurgen Vinju.

PhD in progress : Jouke Stoel, “Model Driven Infrastructure for Core Banking”, 2014, Jurgen Vinju, Tijs van der Storm.

8.2.3. Juries

Jurgen Vinju acted as reading committee member of the PhD of Maartje de Jonge, at TU Delft.

8.3. Popularization

Paul Klint:

- De Softwarerevolutie, Valedictory lecture.
- Nemo, Hoe ontstond de eerste computer?
- Nemo/Klokhuis, Hoe ontstond de eerste computer?
- BYOM: Bring Your Own Metrics (EQUA Symposium).
- The Revenge of the Coroutines (SEN Symposium).

Tijs van der Storm:

- Who’s afraid of Object Algebras?, Joy of Coding 2014.
- Hack your DSL with Rascal, CodeGeneration 2014.
- The Rascal Language Workbench, NSPyre, 2014.
- I am plain text, – resistance is futile, Sioux, 2014.
- Rascal: functional programming for source code analysis and transformation, guest lecture at Hogeschool van Arnhem en Nijmegen (HAN).

Jurgen Vinju:

- De allereerste computerprogrammeur Ada Lovelace (1815 - 1852), Kennis van NU (radio appearance).
- Complexe Software, Eindhovens Dagblad.
- De eerste programmeur, VPRO Gids.

Jan van Eijck is member of the Advisory Board (‘Raad van Advies’) of the Artificial Intelligence Curriculum, University of Groningen (since Summer 2013). Paul Klint acts as treasurer of the EAPLS and was directory of the Master Software Engineering at Universiteit van Amsterdam (UvA) until September 1, 2014. He is also board member of the Instituut voor Programmatuur en Algoritmiek (IPA). Tijs van der Storm is head of the internship committee at CWI, co-organizer of the CWI Scientific Meeting and secretary of the CWI works council.

DREAMPAL Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. member of the organizing committee

F. Guyomarch, P. Marquet and S. Meftali are members of the ComPAS organizing committee. This conference will take place in Lille in 2015.

F. Guyomarch and S. Meftali are members of the Archi organizing committee. This summer school will take place in Lille in 2015.

R. Ben Atitallah is a member of the Green Days@Rennes organizing committee. The scientific event was held in Rennes, July 2014.

8.1.2. Scientific events selection

8.1.2.1. responsable of the conference program committee

S. Meftali is responsible of the ComPAS conference program committee. This conference will take place in Lille in 2015.

8.1.2.2. member of the conference program committee

F. Guyomarch is a member of the ComPAS program committee.

V. Rusu is a member of the WRLA2014 program committee.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Licence : Philippe Marquet, Introduction to Computer Science, 15h, Secondary Education Teacher Training, Université Lille 1, France

Licence : Philippe Marquet, System Programming, 60h, L3, Université Lille 1, France

Master: Philippe Marquet, Design of Operating System, 60h, M1, Université Lille 1, France

Master: Philippe Marquet, Web of Things: Embedded System Programming, 20h, M1, Université Lille 1, France

Master: Philippe Marquet, Parallel and Distributed Programming, 24h, M1, Université Lille 1, France

Master: Philippe Marquet, Introduction to Innovation and Research, 15h, M2, Université Lille 1, France

Licence : Samy Meftali, Architecture des ordinateurs, 75h, L2, UFR IEEA, Université Lille 1, France

Licence : Samy Meftali, Programmation du matériel, 40h, L3, UFR IEEA, Université Lille 1, France

Master: Samy Meftali, Architectures évoluées des ordinateurs, 80h, M1, UFR IEEA, Université Lille 1, France

Master: Samy Meftali, Vérification des SoC, 16h, M2, UFR IEEA, Université Lille 1, France

Licence : Jean-Luc Dekeyser, Architecture des ordinateurs, 80h, L2, UFR IEEA, Université Lille 1, France

Master: Jean-Luc Dekeyser, Architectures évoluées des ordinateurs, 105h, M1, UFR IEEA, Université Lille 1, France

Licence : F. Guyomarch, Algorithmique et programmation, 144h, L1, IUT-A (Univ. Lille 1)

Licence : F. Guyomarch, Modélisation et théorie des langages, 64h, L2, IUT-A (Univ. Lille 1)

Licence : F. Guyomarch, Modélisation mathématique, 28h, L2, IUT-A (Univ. Lille 1)

Licence : Rabie Ben Atitallah, Introduction to Computer Architecture and Operating System, 36h, L2, Université de Valenciennes et du Hainaut-Cambrésis, France

Licence : Rabie Ben Atitallah, Algorithms and Language C Programming, 48h, L2, Université de Valenciennes et du Hainaut-Cambrésis, France

Master: Rabie Ben Atitallah, Tools for Embedded System Design, 32h, M2, Université de Valenciennes et du Hainaut-Cambrésis, France

Master: Rabie Ben Atitallah, Development and Compilation of Embedded Application, 32h, M2, Université de Valenciennes et du Hainaut-Cambrésis, France

Master : V. Rusu, Architecture avancée des ordinateurs, 42h, M1, UFR IEEA, (Univ. Lille 1)

Master : V. Rusu, Spécification et vérification de logiciels , 27h, M1, UFR IEEA, (Univ. Lille 1)

8.2.2. Supervision

PhD : A. Arusoai, *A Generic Framework for to Symbolic Execution*, Univ. Iasi (Romania), Sept 2014. Supervisors: D. Lucanu, V. Rusu.

PhD in progress : H. Krichene, SCAC : *Modèle d'exécution générique faiblement couplé pour les architectures massivement parallèle sur puce*, March 2011, Philippe Marque & Jean-Luc Dekeyser

PhD in progress : W. Chouchene, *Partial reconfiguration model for dynamic and massively parallel architecture : towards 3D FPGAs*, 01/10/2013, Jean-Luc Dekeyser, Rabie Ben Atitallah and Samy Meftali

PhD in progress : K. Ali, *Massively parallel dynamically reconfigurable architecture for real-time vidéo processing applications*, 01/10/2013, Jean-Luc Dekeyser, Rabie Ben Atitallah

PhD in progress : V. Viswanathan, *Parallel and Dynamic reconfigurable computing system*, 01/02/2012, Jean-Luc Dekeyser and Rabie Ben Atitallah

PhD in progress : V. Craciun, *Hardware monitoring*, Sept 2014, F. Guyomarch and D. Lucanu.

8.2.3. Juries

Doctorat de Amel Khiar, Virtualisation des communications au sein d'une plateforme hétérogène et reconfigurable dynamiquement, Université de Cergy Pontoise, 5 novembre 2014, Samy Meftali (examineur).

Doctorat de Ferial Ben Abdallah, Modeling and Formal Verification of Power Management for the Design of Systems-on-Chip, Université de Valenciennes, 12 décembre 2014, Samy Meftali (examineur).

8.3. Popularization

Philippe Marquet is vice-president of the *Société informatique de France*, the French learned society in computer science.

Philippe Marquet is involved in scientific popularization and co-animates the group of people interested in science popularization within the Inria Lille - Nord Europe Research Center. He is also a member of the group for networking about computer science popularization inside Inria.

He organizes and participates to the visit of classrooms on the Inria Plateau at EuraTechnologies, promoting interactions between the scientific community and secondary school students and their teachers. He organizes and/or animates events with children and/or adults in order to initiate them to code via Scratch or to computer science via unplugged activities (Poitiers, February 2014; Paris, October 2014; Inria Lille, December 2014).

Philippe Marquet is a member of the editorial board of 1024, the new bulletin of the *Société informatique de France* that aims at showing informatics, science and technology, in all its dimensions. 1024 targets a wide audience, from high school students to researcher, including anyone interested in computer science.

Hana Krichene participated in a contest "my thesis in 180 seconds", March 2014 - University Lille 1. The aim of the competition is to present the PhD student researches in simple terms in 3 minutes, with a clear, concise and convincing presentation to a diverse audience.

DOLPHIN Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. General chair, Scientific chair

- E-G. Talbi: META'2014 Int. Conf. on Metaheuristics and Nature Inspired Computing, Marrakech, Morocco, Oct 2014.
- E-G. Talbi: IEEE NIDISC'2015 Workshop on Nature Inspired distributed Computing, Phoenix, USA, May 2014.
- L. Brotcorne, Stream Chair IFORS 2014, Revenue Management and Pricing, Barcelona, Spain, July 2014.

9.1.1.2. Member of the organizing committee

- L. Jourdan: META'2014 Int. Conf. on Metaheuristics and Nature Inspired Computing, Marrakech, Morocco, Oct 2014.
- N. Melab: Organization of Grid'5000 training at Inria Lille, November 20th, 2014
- N. Melab: Organization of 5 seminars on high performance computing (Idris, UMONS, Nvidia, EDF R&D and Laboratoire d'Infochimie, Univ. of Strasbourg).
- L. Brotcorne, Chair of the "Prix Jeune Chercheur de la ROADEF", Bordeaux, Feb 2014.
- L. Brotcorne, Vice-President of the Euro Working Group on Pricing and Revenue Management.
- L. Brotcorne, Board Member of the ROADEF Society.
- Vice-President of the Euro Working Group on Pricing and Revenue Management.

9.1.2. Scientific events selection

9.1.2.1. Responsible of the conference program committee

- D. Brockhoff: ACM GECCO'2014 track chair EMO (Evolutionary Multi-objective Optimization) track.

9.1.2.2. Member of the conference program committee

- ECAI 2014, 21st European Conference on Artificial Intelligence (Prague, Czech Republic, 2014)
- GECCO 2014, Genetic and Evolutionary Computation Conference, Evolutionary Combinatorial Optimization and Metaheuristics (ECOM) track (Vancouver, Canada, 2014)
- EvoCOP 2014: 14th European Conference on Evolutionary Computation in Combinatorial Optimisation (Granada, Spain, 2014)
- LION 2015: 9th Learning and Intelligent Optimization Conference (Lille, France, 2015)
- EMO 2015: 8th International Conference on Evolutionary Multi-criterion Optimization (Guimarães, Portugal, 2015)

9.1.3. Journal

9.1.3.1. Member of the editorial board

- Guest editors of a special issue on Evolutionary Multiobjective Optimization, European Journal of Operational Research, co-edited by Dimo Brockhoff, Bilel Derbel, Arnaud Liefooghe and Sébastien Verel.

- Guest editors of a special issue on Computational intelligence for Cloud computing, IEEE Computational Intelligence Magazine, co-edited by El-ghazali Talbi, Pascal Bouvry.

9.1.3.2. Reviewer

- A Quarterly Journal of Operations Research (4OR, Springer)
- Discrete Applied Mathematics (DAM, Elsevier)
- European Journal of Operational Research (EJOR, Elsevier)
- Journal of Heuristics (HEUR, Springer)
- Soft Computing (SOCO, Springer)
- IEEE Transactions on Evolutionary Computation
- Applied Soft Computing
- Journal of Supercomputing
- International Transactions in Operational Research
- IEEE/ACM Transactions on Computational Biology and Bioinformatics
- Evolving Systems Journal
- Evolutionary Computation
- Computers and Operations Research
- IEEE Transactions on Cybernetics
- ACM Computing Surveys
- Computation and Concurrency: Practice and Experience
- International Journal of Parallel, Emergent and Distributed Systems

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- Licence: A. Liefoghe, Algorithmic and Data structure, 36h ETD, L2, Université de Lille 1, France
- Licence: A. Liefoghe, Algorithmic for Operations Research, 36h ETD, L3, Université de Lille 1, France
- Master: A. Liefoghe, Databases, 30h ETD, M1, Université de Lille 1, France
- Master: A. Liefoghe, Advanced Object-oriented Programming, 53h ETD, M2, Université de Lille 1, France
- Master: A. Liefoghe, Combinatorial Optimization, 10h ETD, M2, Université de Lille 1, France
- B. Derbel is the co-supervising the Master 2 MOCAD (Complex Models, Algorithms, Data)
- Master : Bilel Derbel, Combinatorial Optimization, 35h, M2, University Lille 1, France
- Master : Bilel Derbel, Grid Computing, 16h, M2, University Lille 1, France
- Master : Bilel Derbel, Parallel and Distributed Programming, 35h, M1, University Lille 1, France
- Master : Bilel Derbel, Advanced Object Programming, 132h, M1, University Lille 1, France
- Master : Bilel Derbel, Algorithms and Applications, 28h, M1, University Lille 1, France
- Laetitia Jourdan: Master in Computer Sciences and Master MIAGE of University of Lille 1: Business Intelligence (30h), Datamining (60h), Datawarehouse (30h)
- Laetitia Jourdan : Informatique L1 University of Lille 1 48h
- Laetitia Jourdan: Responsible of sandwich courses in Master Lille 1
- Laetitia Jourdan: Co-responsible of Licence 1 Computer Science
- Master: D. Brockhoff, Advanced Control, 18.25h, M2, Ecole Centrale Paris, Chatenay-Malabry, France

- Master : N. Melab, Supercomputing, 33h, M2, Université Lille 1, France
- Master : N. Melab, Operations Research, 82h, M1, Université Lille 1, France
- Master leading: N. Melab, Co-head (with C. Chainais) of the master 2 of advanced scientific computing, U. Lille 1
- Master creation: N. Melab, Participation to the proposition of a new master of engineering at Lille 1
- Engineering school : Clarisse Dhaenens, Graphs and Combinatorics, 80 HeqTD, Polytech Lille, University Lille 1, France
- Engineering school : Clarisse Dhaenens, Operations Research, 70 HeqTD, Polytech Lille, University Lille 1, France
- Engineering school : Clarisse Dhaenens, Algorithmics and programming, 45 HeqTD, Polytech Lille, University Lille 1, France
- Engineering school : Luce Brotcorne, Optimisation, 17h ETD, IMA4, Polytech Lille, France
- Engineering school : Luce Brotcorne, Recherche Opérationnelle, 24 h ETD, IEESP2, Polytech Lille, France
- Engineering school : Luce Brotcorne, Analyse Numérique et Optimisation, 18h ETD, Ecole Centrale de Lille, France
- Engineering school : Luce Brotcorne, Modèles d'affectation du trafic, 6hETD, Ecole Centrale de Lille, France
- Engineering school : El-Ghazali Talbi, Advanced optimization, 36h, Polytech'Lille, University Lille 1, France
- Engineering school : El-Ghazali Talbi, Data mining, 36h, Polytech'Lille, University Lille 1, France
- Engineering school : El-Ghazali Talbi, Operations research, 60h, Polytech'Lille, University Lille 1, France
- Engineering school : El-Ghazali Talbi, Graphs, 25h, Polytech'Lille, University Lille 1, France
- Polytech Lille : Marie-Eléonore Marmion, Database, 67h ETD, 1st year, Université Lille 1, France
- Polytech Lille : Marie-Eléonore Marmion, Algorithm and Programming, 45h ETD, 1st year, Université Lille 1, France
- Polytech Lille : Marie-Eléonore Marmion, Graph, 10h ETD, 1st year, Université Lille 1, France
- Polytech Lille : Marie-Eléonore Marmion, Data Mining, 10h ETD, 3rd year, Université Lille 1, France

E-learning

Lecture in a E-learning master degree at the University of Lille 1 : Bilel Derbel, Cluster et Grille de Calcul, 2 days on-site, and 3 distance courses, COROLIA Training - Digital Learning Pole, Lille TELECOM , Master 2 TIIR E-learning, continuing education, ten students enrolled.

9.2.2. Supervision

PhD : Nadia Dahmani, Multi-objective packing problems, 02/2014, El-Ghazali Talbi and François Clautiaux

PhD : A. Stathakis, Satellite payload reconfiguration optimization, 10/2014, El-Ghazali Talbi and Pascal Bouvry

PhD in progress : : Sophie Jacquin, Combining exact method and metaheuristics for production problems, début : 1/10/2012, Co-direction : El-Ghazali Talbi et Laetitia Jourdan

PhD in progress: Datamining et optimisation combinatoire adaptés à la prévention et à l'orientation de patients, Maxence Vandromme début : 1/06/2014, CIFRE with Alicante Co-direction : Clarisse Dhaenens and Laetitia Jourdan

PhD in progress: Gauvain Marquet, Mono-objective decomposition for multi-objective optimization, University Lille 1, Sep. 2014, Bilel Derbel and El-Ghazali Talbi

PhD : Trong-Tuan Vu, Heterogeneity and locality-aware work stealing for large scale branch-and-bound irregular algorithms, Inria University Lille 1, 12 Dec 2014, Bilel Derbel and Nouredine Melab

PhD in progress : Thanh-Do Tran, Benchmarking Continuous Multiobjective Optimization Algorithms, since 12/2011, Dimo Brockhoff and El-Ghazali Talbi

PhD defended: Trong Tuan VU, Heterogeneity and Locality-aware Work Stealing for Large Scale Branch-and-Bound Irregular Algorithms, Nouredine Melab and Bilel Derbel, December 12th, 2014

New PhD: Jan GMYS, Optimization and simulation of electrical networks using massively parallel heterogeneous computing, Nouredine Melab and Daniel Tuytens (UMONS, Belgium), since October 2014.

PhD in progress : Rudi LEROY, Massively parallel tree-based exact algorithms for hybrid clusters, 11/05/2012, Nouredine Melab

PhD in progress : Francois LEGILLON, Static and Dynamic Resource Brokering on multi-clouds, 09/01/2010, Nouredine Melab and El-Ghazali Talbi

PhD in progress : Sylvain Dufourny, Optimisation de décisions économiques concurrentielles dans un simulateur de gestion d'entreprise, Novembre 2012, Clarisse Dhaenens

PhD in progress : Sezin Afsar, Bilevel models for energy pricing problems , 09/2011, L. Brotcorne

PhD in progress : Martin Bue, Optimisation d'un service de réservation hôtelière, 09/2011, L. Brotcorne, F. Clautiaux.

PhD in progress : Bayrem Tounsi, Optimisation conjointe des opérations de transport et préparation dans le cadre du E-commerce, 09/2011, L. Brotcorne.

PhD in progress : A. Q. Nguyen, Green scheduling on cloud computing systems, 11/2012, El-Ghazali Talbi and Pascal Bouvry

PhD in progress : Oumayma Bahri, Fuzzy multi-objective optimization, 11/2013, El-Ghazali Talbi and Nayla Ben-Omar

PhD in progress : Asma Gannouni, Stochastic multi-objective optimization using metaheuristics , 11/2013, El-Ghazali Talbi and Rachid Ellaia

9.2.3. *Juries*

- D. Brockhoff: external reviewer for the Luxembourg National Research Fund (FNR).
- N. Melab: HDR Matthieu Basseur, Université d'Angers, December 3rd, 2014.
- C. Dhaenens: President of the recruiting committee for associate professorship in computer science (COS McF 27 - Univ. Lille 1 - 2014) - 3 positions.
- C. Dhaenens: Problème de caractérisation multiple - Application à la détection de souches bactériennes phytopathogènes de Fabien Chhel, Université d'Angers, encadrants : Frédéric Lardeux, Frédéric Saubion, Octobre 2014, (Présidente)
- C. Dhaenens: Modèles d'abstraction pour la résolution de problèmes combinatoires, HDR de Adrien Goeffon, Université d'Angers, garant : Frédéric Saubion, Novembre 2014, (Rapporteur)
- L. Brotcorne, Member of the commission for the Concours CR Inria 2014.
- L. Brotcorne, Member of the COST GTRI Inria.
- Luce Brotcorne : Planification des opérations de cross-docking, de Anne-Laure Ladier, University of Grenoble, Encadrants : G. Alpan november 2014 (Rapporteur).

9.3. Popularization

- Bioinspired computing - talk in undergraduate and graduate schools
- Inaugural conference of Math en Jean - Bioinspired computing (see <http://lille1tv.univ-lille1.fr/videos/video.aspx?id=6b894d87-bcd3-4ee5-a69c-7af3a2b6446f>)
- Operational research - for 2nde during integration week (June 2015)
- E-learning in algorithmics http://ressources.unisciel.fr/progcartes/co/_web.html
- Optimisation des données, Interstice
- Invited GECCO'2013 tutorial on Evolutionary Multiobjective Optimization
- Invited tutorial on Evolutionary Multiobjective Optimization (Reseau Mexico meeting, November 2014 in La Rochelle, France)
- Invited talk at PGMO-COPI conference on Multiobjective CMA-ES (November 2014 in Palaiseau, France)

MEPHYSTO Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. General chair, scientific chair

S. De Bièvre is the scientific coordinator of CEMPI

9.1.1.2. Member of the organizing committee

D. Bonheure and A. Gloria organize a PDE and analysis seminar at Brussels (<http://homepages.ulb.ac.be/~dbonheur/seminaire-ANEDP.html>).

G. Dujardin and I. Lacroix are in charge of the PDE and numerical analysis seminar of the Paul Painlevé mathematics department in Lille (<http://math.univ-lille1.fr/d7/sanedp>).

G. Francfort (Paris 13), A. Gloria, and M. Kruzik organized a workshop "Relaxation, homogenization and dimensional reduction in hyperelasticity" at Université Paris-Nord, March 25-27, 2014 (<http://staff.utia.cas.cz/kruzik/workshop/>).

9.1.2. Journal

9.1.2.1. Member of the editorial board

D. Bonheure is associate editor at the Bulletin of the Belgian Mathematical Society - Simon Stevin (<http://projecteuclid.org/DPubS?service=UI&version=1.0&verb=Display&handle=euclid.bbms>), the Journal of calculus of variations (<http://www.hindawi.com/journals/jcv/>), and International Scholarly Research Notices (<http://www.hindawi.com/journals/isrn/>).

C. Chainais and A. Gloria are associate editors at the North-Western European Journal of Mathematics (<http://math.univ-lille1.fr/~nwejm/>), a new journal launched by the mathematical departments of the French region Nord-Pas-De-Calais.

9.1.2.2. Reviewer

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

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

The members of the team are mainly academics. We teach at the licence and master levels at the Université Lille 1 and ULB.

9.2.2. Supervision

PhD in progress: P.-L. Colin, Theoretical and numerical study of some corrosion models, since October 2012, advised by C. Chainais and I. Lacroix-Violet.

PhD in progress: M. Duerinckx, Problems in stochastic homogenization, since October 2014, advised by A. Gloria and S. Serfaty (UPMC).

PhD in progress: E. Soret, Stochastic acceleration and thermalization, since October 2011, advised by S. De Bièvre and T. Simon (Lille 1).

9.3. Popularization

C. Calgaro is the organizer of the action "Mathématiques itinérantes" (<http://mathematiques.univ-lille1.fr/Ouvertures/Mathematiques-itinerantes/>), which promotes mathematics among young people (conferences in highschools, "journées de la science", etc.). Members of the team regularly participate in these actions.

MODAL Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. general chair, scientific chair

Alain Celisse, Julien Jacques and Guillemette Marot organized and were the scientific chairs of the workshop Kernel Methods for Big data, 31 March - 2 April 2014 <http://math.univ-lille1.fr/~jacques/KernelMethod-Lille-2014.html>

Guillemette Marot was the general chair and the scientific chair of the first session of the scientific day organized by Bilille platform about bioinformatics around integrative biology, Dec 17, 2014 <http://www.lifl.fr/~touzet/PPF/integrative.html>

Cristian Preda was member of the Scientific Committee of the 7-th international Workshop on Applied Probability (Antalya, 16-19 June, 2014).

9.1.1.2. member of the organizing committee

Since 12, C. Biernacki is the president of the data mining and learning group of the French statistical association (SFdS) <http://www.sfds.asso.fr/>.

Sophie Dabo-Niang co-organized the session "Functional Statistics and Hydrology" of the international conference "Statistics and Hydrology", in november 2014, Masdar Institute, Abu-Dhabi.

Alain Celisse belongs to the "Mathematical statistics" board of The French Statistical Association (SFDS)

Julien Jacques belongs to the "Statistics and Image" board of The French Statistical Association (SFDS) and animated the probability and statistics seminar of the Laboratory of mathematics "Painlevé" of U. Lille 1.

Guillemette Marot is a member of the organizing committee of seminars from Bilille platform. More information about all seminars of the year is available on <https://wikis.univ-lille1.fr/bilille/animation>.

9.1.2. Journal

9.1.2.1. member of the editorial board

Christophe Biernacki is an associate editor, since 10, of the journal Case Studies in Business, Industry and Government Statistics (CSBIGS) <http://www.bentley.edu/centers/csbig>.

Cristian Preda is an associate editor (since 2013) of the Journals : Methodology and Computing in Applied Probability (<http://www.springer.com/statistics/journal/11009>) and Romanian Journal of Mathematics and Computer Science (<http://www.rjm-cs.ro>)

9.1.2.2. reviewer

Alain Celisse is reviewer for numerous top-level statistical journals: Annals of Statistics, Electronic journal of Statistics, Biometrika, JSPL...

Julien Jacques has reviewed papers for Statistics and Computing, Journal of Applied Statistics, Computational Statistics and Data Analysis, Communications in Statistics, European Journal of Operational Research.

Guillemette Marot has reviewed papers for Statistical Applications in Genetics and Molecular Biology, BMC Bioinformatics and Journal of Bioinformatics Research Studies

Vincent Vandewalle has reviewed papers for Pattern Recognition, Advances in Data Analysis and Classification and International journal of computer mathematics

9.1.3. Invited Talks

Christophe Biernacki gave two invited talks of two hours each to the “Journées d’Etudes en Statistique” in October 2014 at Frejus (http://www.sfds.asso.fr/23-Les_Journees_dtudes_en_Statistique_JES). Subjects were “mixture models” and “high dimensional clustering”, both from the general topic model choice and agregation.

Cristian Preda was invited as speaker in the special session on Statistics in functional and Hilbert spaces, ERCIM 2014, 7th International Conference of the ERCIM working group on Computational and Methodological Statistics, Pisa, Italy, December 2014.

The other invited talks are included into the bibliography.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Christophe Biernacki is head of the M2 Ingénierie Statistique et Numérique <http://mathematiques.univ-lille1.fr/Formation/>

Vincent Vandewalle is head of the DUT Statistique et Informatique Décisionnelle, <http://iut.univ-lille2.fr/fr/statistique-et-informatique-decisionnelle.html>

Licence: A. Celisse, Mathematics for computer science, 48h, L1, U. Lille 1, France

Licence : S. Iovleff, Analysis and numerical methods, 28h, L1, U. Lille 1, France.

Licence : S. Iovleff, Linear Algebra, 74h, L1, U. Lille 1, France

Licence : S. Iovleff, Discrete mathematics, 42h, L1, U. Lille 1, France

Licence : G. Marot, Biostatistics, 9h, L1, U. Lille 2, France

Licence: C. Preda, Probability, 40h, L1, U. Lille 1, France

Licence: C. Preda, Inferential Statistics, 50h, L1, U. Lille 1, France

Licence : V. Vandewalle, Simulation Techniques, 16h, L1 , U. Lille 2, France

Licence : V. Vandewalle, Descriptive statistics, 62h, L1 , U. Lille 2, France

Licence : V. Vandewalle, Probabilities, 80h, L1 , U. Lille 2, France

Licence: A. Celisse, Mathematics for computer science, 48h, L2, U. Lille 1, France

Licence: S. Iovleff, Mathematics, 28h, L2, U. Lille 1, France

Licence: S. Iovleff, Operational research, 28h, L2, U. Lille 1,France

Licence : V. Vandewalle, Analysis, 24h, L2, U. Lille 2, France

Licence : V. Vandewalle, Project management, 9h, L2, U. Lille 2, France

Licence : S. Iovleff, Probability and Statistics, 32h, L3, U. Lille 1, France.

Licence : J. Jacques, Inferential Statistics, 50h, L3, U. Lille 1,France

Licence : V. Vandewalle, Data analysis, 30h, L3, U. Lille 2, France

Licence : Q. Grimonprez, Probability, 4h, L3, U. Lille 1, France.

Master : C. Biernacki, Mathematical statistics, 60h, M1, U. Lille 1, France

Master : C. Biernacki, coaching project, 10h, M1, U. Lille 1, France

Master : Q. Grimonprez, Data Analysis, 36h, M1, U. Lille 1, France

Master : Q. Grimonprez, Classification, 8h, M1, U. Lille 1, France

Master: S. Iovleff, Monte Carlo method, 30h, M1, U. Lille 1, France

Master: J. Jacques, Data Analysis, 40h, M1, U. Lille 1,France

Master: J. Jacques, Statistical Modelling, 30h, M1, U. Lille 1, France
 Master: M. Marbac-Lourdelle, Data Analysis, 48h, M1, U. Lille 1, France
 Master: G. Marot, Biostatistics, 49h, M1, U. Lille 2, France
 Master: G. Marot, Coaching project, 10h, M1, U. Lille 2, France
 Master: C. Preda, Data Analysis, 40h, M1, U. Lille 1, France
 Master: C. Thery, Linear Models, 12h, M1, U. Lille 1, France
 Master : C. Biernacki, Data analysis, 97.5h, M2, U. Lille 1, France
 Master : C. Biernacki, Analysis of variance and experimental design, 22.5h, M2, U. Lille 1, France
 Master : C. Biernacki, coaching internship, 20h, M2, U. Lille 1, France
 Master: A. Celisse, Statistical theory, 30h, M2, U. Lille 1, France
 Master: B. Guedj, Statistical Learning and Data Mining, 8h, M2, ENSAE ParisTech, France
 Master: J. Jacques, Time Series, 25h, M2, U. Lille 1, France.
 Master: C. Preda, Biostatistics, 12h, M2, U. Lille 1, France
 Master: C. Preda, Functional data analysis, 12h, M2, U. Lille 1, France
 Doctorat: G. Marot, Data Analysis with R, 18h, U. Lille 2, France

9.2.2. Supervision

PhD : Loïc Yengo, Contribution to variable clustering in high dimensional linear regression models, Univ. Lille 1, May 28th, 2014, J. Jacques, C. Biernacki
 PhD : Alexandru Amarioarei, Approximations for Multidimensional Discrete Scan Statistics, Univ. Lille 1, September 15th, 2014, C. Preda (<https://ori-nuxeo.univ-lille1.fr>)
 PhD : Matthieu Marbac-Lourdelle, Model-based clustering for categorical and mixed data sets, Univ. Lille 1, September 23rd, 2014, C. Biernacki, V. Vandewalle
 PhD in progress : Clément Thery, Classification in high dimension, from 2011, C. Biernacki
 PhD in progress : Florence Longeville, Analysis of variance with nested factors for counting data - Application to control quality, from Dec 1st, 2012, J. Jacques, C. Preda
 PhD in progress : Quentin Grimonprez, Detection of change points and peaks in high dimension, from Oct 1st, 2013, A. Celisse, G. Marot, J. Jacques
 PhD in progress : Jérémie Kellner, Generative models and kernel methods Jeremie, from Oct 1st, 2013, A. Celisse, C. Biernacki
 PhD in progress : Maxime Brunin, The computation time/accuracy trade-off in statistical learning, from Oct 1st, 2014, A. Celisse, C. Biernacki

9.2.3. Juries

Alain Celisse was a jury member for one associate professor competition.

Sophie Dabo-Niang was a referee and member of the jury of

- Mohamed Badaoui thesis's, March, 2014, Oujda, Maroc
- Tamaro Johng-Ay thesis's, April, 2014, Pau, France
- Abdourahmane Diallo thesis's, December 2014, Marseille, France

Julien Jacques was reviewer of the Ph.D. of Damien McPartland (University College Dublin) and Anastasios Bellas (University Paris 1) and a jury member for one associate professor competition.

Guillemette Marot was a jury member for two associate professor competitions.

9.3. Popularization

- **Fête de la Science**

Participant: Vincent Kubicki

Fête de la Science is a series of presentations in high schools. The objective is to meet the students and expose them to the research environment and the applications of the work done by the team.

- **XPérium Lille 1**

Participants: Quentin Grimonprez, Vincent Kubicki, Samuel Blanck, Maxime Brunin, Christophe Biernacki, Serge Iovleff, Julien Jacques, Vincent Vandewalle

Vulgarization of MODAL's research to sensitize high school students and members of Lille 1 university: <https://modal.lille.inria.fr/xperium/>

NON-A Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. member of the organizing committee

- J.-P. Richard, a member of NOC of 20th IFAC World Congress, Toulouse, France, 10-14 July 2017
- W. Perruquetti, National Projects Vice-Chair at ECC 2014, Strasbourg, France, 24-25 June 2014

9.1.2. Scientific events selection

9.1.2.1. responsable of the conference program committee

- J.-P. Richard, Associate Editor, EUCA-IEEE ECC'15, Linz, Austria (14th European Control Conference) June 15-17, 2015, <http://www.ecc15.at>
- J.-P. Richard, Associate Editor, IEEE MED'2015, Torremolinos, Spain (23rd IEEE Mediterranean Conference on Control and Automation) June 16-19, 2015, <http://med2015.uma.es>
- J.-P. Richard, Associate Editor, IFAC TDS'2015, Ann Arbor, MI, USA (12th IFAC Workshop on Time Delay Systems), Univ. of Michigan, 28-30 juin 2015, <http://me.engin.umich.edu/dirifac/>
- J.-P. Richard, Associate Editor, EUCA-IEEE ECC'14, Strasbourg, France (13th European Control Conference) June 24-27, 2014, <http://www.ecc14.eu>
- J.-P. Barbot, IPC-Chair, 13th International Workshop on Variable Structure Systems, Nantes, France, 29 June-2 July 2014

9.1.2.2. member of the conference program committee

- J.-P. Richard, IEEE ICCVE 2014, Vienna, Austria (3rd Int. Conference on Connected Vehicles & Expo), Nov. 3-7, 2014, <http://www.iccve.org/>
- J.-P. Richard, IOV 2014, Beijing, China (International Conference on Internet of Vehicles), Sept. 1-3, 2014, <http://www.bjiiov.org/>
- J.-P. Richard, SC2 2014, Beijing, China (4th Internat. Symposium on Cloud and Service Computing, co-conf. within IOV2014), Sept. 1-2, 2014, <http://www.bjiiov.org/>
- J.-P. Richard, IFIP WWIC 2014, Paris, France (12th IFIP Int. Conf. on Wired & Wireless Internet Communications), May 26-28, 2014, <http://www.lissi.fr/wwic2014/>
- J.-P. Richard, EuroHaptics'14, Versailles, France (14th EHS European conference on Haptic Systems), June 24-27, 2014, <http://www.eurohaptics.org/>
- J.-P. Richard, IEEE SaCoNeT 2014, Vilanova i la Geltrú, Spain (5th IEEE Int. Conference on SmArt Communications in NeTwork Technologies), June 18-20, 2014, <http://www.craax.upc.edu/saconet2014/>
- W. Perruquetti and D. Efimov, IFAC World Congress 2014, Cape Town, South Africa
- A. Polyakov, 13th International Workshop on Variable Structure Systems, Nantes, France

9.1.2.3. reviewer

Members of the team have been involved in the evaluation process of many papers submitted to many international conferences: IEEE Conference on Decision and Control, IFAC World Congress 2014, European Control Conference, American Control Conference, ICRA, ...

9.1.3. Journal

9.1.3.1. member of the editorial board

- T. Floquet, Member of Editorial Board, Mathematical Problems in Engineering (Impact Factor: 1.082)
- A. Polyakov, Member of Editorial Board, Journal of Optimization Theory and Applications (Impact Factor: 1.406)
- A. Polyakov, Associate Editor, Journal of the Franklin Institute (Impact Factor: 2.260)
- A. Polyakov, Editor, International Journal of Robust and Nonlinear Control (Impact Factor: 2.652)

9.1.3.2. reviewer

The members of Non-A are reviewers for most of the journals of the control and signal communities: IEEE Transactions on Automatic Control, IEEE Transactions on Systems and Control Technologies, IEEE Transactions on Industrial Electronics, IEEE Transactions on Signal Processing, Automatica, SIAM Journal on Control and Optimization, Journal of Computation and Applied Mathematics, Systems & Control Letters, International Journal of Control, International Journal of Robust and Nonlinear Control, International Journal of Systems Science, IET Control Theory & Applications, Automation and Remote Control, Journal of Optimization Theory and Applications, Fuzzy Sets and Systems, Mathematics and Computers in Simulation, International Journal of Modeling and Simulation, Journal of the Franklin Institute, ...

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- Licence : Lotfi Belkoura; Automatique (systèmes linéaires monovariables)(75h), Introduction à la Robotique (25h), L3; Lille 1; France
- Licence : Gang Zheng; TP Automatic control (16h), L2; EC Lille; France
- Licence : Samer Raichy; Systèmes linéaires, Asservissements, Conversion d'énergie, Echantillonnages et systèmes discrets (192h), L3; ENSEA; France
- Licence : Rosane Ushirobira; TP Automatic control (16h), L2; TP Numerical Analysis (20h), L1; EC-Lille and Polytech Lille; France
- Master : Jean-Pierre Richard; Systèmes dynamiques (30h), Métiers de la recherche (4h), Modélisation des systèmes complexes(12h), Commande et observation (12h), Séminaire episteme (24h); EC-Lille; France
- Master : Wilfrid Perruquetti; Systèmes dynamiques non linéaires et à retards (30h), M2; Lille 1 – EC-Lille, France
- Master : Lotfi Belkoura; Représentation d'état (55h), M1; Projets (10h), M1; Introduction aux distributions (10h), M2; Lille 1; France
- Master : Rosane Ushirobira; Probability and Statistics (20h); M2; EC-Lille; France
- Master : Denis Efimov; TD Automatic control (12h), M1; Analysis of Nonlinear Systems (28h), M2, Lille 1; France

9.2.2. Supervision

- PhD: Omran Hassan, "Commande et observation des systèmes de contrôle en réseau", 2011–2014, supervisors are J.-P. Richard, F. Lamnabhi-Lagarigue and L. Hetel
- PhD: Maalej Sonia, "Algebraic estimation for robust control", 2011–2014, supervisors are L. Belkoura and A. Kruszewski
- PhD in progress : Matteo Guerra, "Supervisory control of collective motion of mobile robots", 2012–..., supervisors are W. Perruquetti, D. Efimov and G. Zheng

- PhD in progress : Zilong Shao, "Oscillatory control of robot manipulator", 2013–..., supervisors are W. Perruquetti, D. Efimov and G. Zheng
- PhD in progress : Hafiz Ahmed, "Identification and modeling of circadian rhythms for oysters", 2013–..., supervisors are D. Efimov, R. Ushirobira and D. Tran
- PhD in progress : Essaid Edjekouane, "Cyber-physical systems", 2012–..., supervisors are J.P. Barbot, S. Riachy and M. Ghanes
- PhD in progress: Guo Qi, "Estimation dynamique des paramètres de robots manipulateur", 2012–..., supervisors are W. Perruquetti and M. Gautier
- PhD in progress: Zohra Kader, "Observation et commande des systèmes affines à commutation", 2014–..., supervisors are L. Belkoura, C. Fiter, L. Hetel
- PhD in progress: Maxime Feingesicht, "Dynamic Observers for Control of Separated Flows", 2015–..., supervisors are J.-P. Richard, F. Kerherve, A. Polyakov

9.2.3. Juries

The team members are also involved in various examination committees of Theses and Habilitations, recruitment committees, in France and abroad (more than 10).

9.3. Popularization

- Non-A team participated in Innorobo 2014 at Lyon, which is the only European event on robotics (<https://team.inria.fr/non-a/2014/12/15/innorobo-2014/>).
- The new platform for mobile robot demonstration in Euratechnologie Inria Lille in December 2014 is provided by using the result of ADT SLIM (<http://www.inria.fr/en/centre/lille/news/robots-superheroes-of-cooperation-and-surveillance>).
- The invited paper [84] is published in the journal ERCIM News. It presents the main goals and the results of the Inria team-project NON-A in the context of Cyber-Physical Systems.

SEQUEL Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. general chair, scientific chair

- P. Chainais has co-organized with Z. Harchaoui the GDR ISIS 1 day workshop on "Learning adapted representations for signal and image processing" in Paris on Feb. 4th, 2014, see <http://www.gdr-isis.fr/index.php?page=reunion&idreunion=234>.
- P. Chainais has led the application of Lille to the organization of the french national Signal Processing conference (GRETSI 2017) : Marrakech won, but we had a good feedback in view of 2019.

9.1.1.2. member of the conference program committee

- AAAI Conference on Artificial Intelligence (AAAI 2014)
- IEEE Approximate Dynamic Programming and Reinforcement Learning (ADPRL 2014)
- French Conference on Planning, Decision-making, and Learning in Control Systems (JFPDA 2014)
- Conférence Apprentissage Automatique (CAP)
- Extraction et Gestion des Connaissances (EGC)

9.1.1.3. reviewer

- International Conference on Pattern Recognition Applications and Methods (ICPRAM 2014)
- Algorithmic Learning Theory (ALT 2014)
- AAAI Conference on Artificial Intelligence (AAAI 2014)
- Conference on Learning Theory (COLT 2014)
- European Workshop on Reinforcement Learning (EWRL 2014)
- Annual Conference on Neural Information Processing Systems (NIPS 2014)
- International Conference on Artificial Intelligence and Statistics (AISTATS 2014)
- European Conference on Machine Learning (ECML 2014)
- International Conference on Machine Learning (ICML 2014)
- International Conference on Uncertainty in Artificial Intelligence (UAI 2014)
- IEEE Congress on Evolutionary Computation (CEC)
- French Conference on Planning, Decision-making, and Learning in Control Systems (JFPDA 2014)
- IEEE FUSION 2014
- IEEE Approximate Dynamic Programming and Reinforcement Learning (ADPRL 2014)

9.1.2. Journal

9.1.2.1. reviewer

- IEEE Transactions on Image Processing
- Journal of Statistical Physics
- Digital Signal Processing
- IEEE Transactions on Information Theory
- IEEE Statistical Signal Processing SSP'2013

- European Signal Processing Conference EUSIPCO 2013
- 10th International Conference on Sampling Theory and Applications (SampTA 2013)
- IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2013 & 2014)
- Annual Conference on Neural Information Processing Systems (NIPS 2013)
- International Conference on Machine Learning (ICML 2013)
- European Conference on Machine Learning (ECML 2013)
- Uncertainty in Artificial Intelligence (UAI 2013)
- Machine Learning Journal (MLJ)
- Journal of Machine Learning Research (JMLR)
- Journal of Artificial Intelligence Research (JAIR)
- IEEE Transactions on Automatic Control (TAC)
- IEEE Transactions of Signal Processing
- Journal of Autonomous Agents and Multi-Agent Systems (JAAMAS)
- Mathematics of Operations Research (MOR)

9.1.3. Invited Talks

- Alessandro Lazaric gave an invited talk on “Approximate Dynamic Programming meets Statistical Learning Theory” at CNRS Journée Des D’ecollements in Orsay (November 2014)
- Alessandro Lazaric gave a talk on “Transfer in Reinforcement Learning” at the “30 minutes of sciences” seminars at Inria Lille (December 2014)
- Michal Valko gave a talk “Bandits on Graphs” at CMLA group at ENS Cachan (December 2014)
- Michal Valko gave a talk “Optimistic Optimization” at CMLA group and at MIST conference, Slovakia (January 2014)
- Ph. Preux gave a talk “décision adaptative face au Big Data”, colloque AAFD, Institut Galilée (April 2014).

9.1.4. Evaluation activities, expertise

- *P. Chainais* is a grant proposal reviewer for the ANR.
- *M. Ghavamzadeh* is in the Editorial Board Member of Machine Learning Journal (MLJ, 2011-present).
- *M. Ghavamzadeh* is in the Steering Committee Member of the European Workshop on Reinforcement Learning (EWRL, 2011-present).
- *P. Preux* and *J. Mary* are experts for *Crédit Impôt Recherche* (CIR).
- *P. Preux* is expert for ANR, ANRT, AERES, FNRS. He was member on the visiting committee of the Laboratoire d’Informatique de Grenoble (LIG)
- *E. Duflos* is a project proposal reviewer for ANR.
- *A. Lazaric* is a project proposal reviewer for ANR.
- *A. Lazaric* is the main organizer of the European Workshop in Reinforcement Learning in 2015.
- *A. Lazaric*, *J. Mary*, *R. Munos*, *O. Pietquin*, and *M. Valko* are members of the Belgium Commission Evaluation F.R.S-FNRS, 2014.
- *M. Valko* is an elected member of the evaluation committee and participates in the hiring, promotion, and evaluation juries of Inria.

9.1.5. Other Scientific Activities

- *D. Ryabko* is a member of COST-GTRI committee at Inria.
- *D. Ryabko* is a general advisor at Inria Lille.

- *E. Duflos* is Director of Research of Ecole Centrale de Lille since September 2011.
- *E. Duflos* is the Head of the Signal and Image Team of LAGIS (UMR CNRS 8219).
- *R. Gaudel* is board member of LIFL.
- *A. Lazaric* is a member of the committee for research evaluation (CER) at Inria Lille.
- *R. Gaudel* manages the proml mailing list. This mailing list gathers French-speaking researchers from Machine Learning community.
- *P. Chainais* is a member of the administration council of GRETSI, the French association of researchers in signal and image processing.
- *P. Chainais* is co-responsible for the action "Machine Learning" of the GDR ISIS which gathers french researchers in signal and image processing at the national level.
- *Ph. Preux* is Head of the LIFL/CRISTAL lab at the Université de Lille 3; he is head of the data intelligence (DatInG) thematic group of CRISTAL; he is on the scientific committee of CRISTAL. He is local organization chair for ICML 2015.

9.2. Teaching - Supervision - Juries

9.2.1. Awards

- D. Calandriello won the best master thesis award from the Italian Association for Artificial Intelligence for his thesis "Sparse Multi-Task Reinforcement Learning". The association awards the prize to the best master thesis focused on AI in Italy in 2014. The thesis was written under the co-supervision of A. Lazaric during a year spent in Sequel
- F. Guillou won the ACM RecSys challenge (on recommendation systems)
- P. Chainais won an IBM Faculty Award for the creation of the option DAD (Data Analysis and Decision making) at Ecole Centrale Lille (10000\$ have been given to EC Lille). The partnership with IBM about Big Data is getting stronger and new perspectives are coming.

9.2.2. Teaching

Licence: R. Gaudel, programmation R pour statistiques et sociologie quantitative, 28h eqTD, L1, université Lille 3, France

Licence: R. Gaudel, projet informatique de traitement des données en SHS, 20h eqTD, L2, université Lille 3, France

Licence: R. Gaudel, préparation au C2i niveau 1, 24h eqTD, L1-3, université Lille 3, France

Master: R. Gaudel, fouille du web, 32h eqTD, M2, université Lille 3, France

Master: R. Gaudel, fouille de données, 30h eqTD, M2, université Lille 3, France

Master: A. Lazaric, Reinforcement Learning, 25h eqTD, M2, ENS Cachan, France

Master: A. Lazaric, Reinforcement Learning, 25h eqTD, M2, Ecole Centrale Lille, France

Master: Ph. Preux, "Modeling, Computer Science, Mathematics", 72h eqTD, M1 pshychology/cognitive science, université Lille 3, France

Master: Ph. Preux, "Formal neural networks", 30h eqTD, M1 cognitive science, université Lille 3, France

Licence: Ph. Preux, "Supervised Learning", 30h eqTD, L3 MIASHS, université Lille 3, France

EC Lille (3rd y.): P. Chainais, "Machine learning", 34h eqTD, Ecole Centrale Lille, France

EC Lille (3rd y.): P. Chainais, "Matlab", 16h eqTD, Ecole Centrale Lille, France

EC Lille (3rd y.): P. Chainais, "Image processing", 16h eqTD, Ecole Centrale Lille, France

EC Lille (3rd y.): P. Chainais, "Representation and data compression", 8h eqTD, Ecole Centrale Lille, France

EC Lille (1st y.): P. Chainais, “Signal processing”, 22h eqTD, Ecole Centrale Lille, France
 EC Lille (2nd y.): P. Chainais, “Wavelets and applications”, 24h eqTD, Ecole Centrale Lille, France
 EC Lille: J. Mary, Machine Learning with R , 20h eqTD
 Master: J. Mary, M2 ID - Univ Lille, Programmation web avancée et design pattern, 64h eqTD
 Master: J. Mary, M1 ID - Univ Lille, Programmation web , 32h eqTD
 Master: J. Mary, M1 ID - Univ Lille, Algorithmique avancée , 32h eqTD
 Master: J. Mary, M1 IIES - Univ Lille, Analyse de données avec R, 32h eqTD
 Master: J. Mary, C2i - Univ Lille, 24h eqTD

E-learning

SPOC : R. Gaudel, Marc Tommasi and Alain Preux, culture numérique S2, 8 semaines,
 Moodle, université Lille 3, licence (L1), formation initiale, tous les étudiants (> 7 000).

9.2.3. Supervision

HDR defended: *Mohammad Ghavamzadeh* defended his “Habilitation à diriger les recherches” on June 12th.

PhD defended: *Boris Baldassari* defended his PhD thesis *Apprentissage automatique et développement logiciel*, on July 1st, advisor: Ph. Preux.

PhD defended: *Gabriel Dulac-Arnold* defended his PhD thesis *A General Sequential Model for Constrained Classification*, on Feb. 7th, advisor: Ph. Preux, L. Denoyer (Paris 6), P. Gallinari (Paris 6).

PhD defended: *Victor Gabillon* defended his PhD thesis “Active Learning in Classification-based Policy Iteration”, on June 12th, advisor: M. Ghavamzadeh.

PhD defended: *Olivier Nicol* defended his PhD thesis “Data-driven evaluation of Contextual Bandit algorithms and applications to Dynamic Recommendation”, on Dec. 18th, advisor: Ph. Preux, J. Mary.

PhD defended: *Emilie Kaufmann* defended her PhD thesis, “Bayesian Bandits”, advisor: R. Munos, O. Cappé, A. Garivier.

PhD in progress: *Frédéric Guillou*, “Sequential Recommender System”, since Oct. 2013, advisor: Ph. Preux, J. Mary, R. Gaudel.

PhD in progress: *Vicenzo Musco*, “Topology and evolution of software graphs”, since Oct. 2013, advisor: P. Preux, M. Monperrus

PhD in progress: *Adrien Hoarau*, “Multi-arm Bandit Theory”, since Oct. 2012, advisor: R. Munos.

PhD in progress: *Tomáš Kocák*, “Sequential Learning with Similarities”, since Oct. 2013, advisor: R. Munos, M. Valko

PhD in progress: *Amir Sani*, “Learning under uncertainty”, Oct. 2011, since advisor: R. Munos, A. Lazaric.

PhD in progress: *Marta Soare*, “Pure Exploration in Multi-arm Bandit”, since Oct. 2012, advisor: R. Munos, A. Lazaric.

PhD in progress: *Hong Phuong Dang*, *Bayesian non parametric methods for dictionary learning and inverse problems*, since Oct. 2013, advisor: P. Chainais.

PhD in progress: *Linh Van Nguyen*, *High resolution reconstruction from low resolution measurements of velocity fields in turbulent flows*, since Oct. 2013, advisor: P. Chainais & J.P. Laval (Laboratoire de Mécanique de Lille).

PhD in progress: *Clément Elvira*, “Bayesian non parametric approaches for blind hyperspectral images unmixing.”, since Oct. 2014, advisor: P. Chainais & N. Dobigeon (IRIT, Toulouse).

PhD started: *Daniele Calandriello, Efficient Sequential Learning in Structured and Constrained Environments*, since Oct. 2014, advisor: M. Valko & A. Lazaric & P. Preux.

PhD started: *Jean-Bastien Grill, Développement et analyse de méthodes numériques efficaces pour de l'optimisation lorsque la régularité de la fonction sous-jacente n'est pas connue a priori.*, since Oct. 2014, advisor: M. Valko & R. Munos

PhD started: *Pratik Gajane, "Sequential Learning and Decision Making under Partial Monitoring"*, since Oct. 2014, advisor: Philippe Preux, Tanguy Urvoy (Orange Labs)

9.2.4. Juries

A. Lazaric was part of the jury of the PhD of Mahdi Milani Fard at McGill University (supervised by J. Pineau).

Ph. Preux was part of the PhD defense jury of W. Wang (Université Paris-Sud, M. Martinez (Université de Lille), G. Dulac-Arnold (Université Paris 6), V. Gabillon, Boris Baldassari, and O. Nicol (all 3 from Université de Lille).

Ph. Preux was part of the HdR defense jury of M. Ghavamzadeh.

P. Chainais was part of the PhD defense jury of Raja Suleiman (supervised by David Mary) at University of Nice, dec. 2014.

9.3. Popularization

- M. Valko gave an Interview on "Face Recognition" at Sciences et Avenir (July 2014)
- M. Valko gave an Interview on "Biometric applications will soon be part of our daily life" at ARTE Future (November 2014)
- Article on research of M. Valko's collaboration with INTEL - Ford and Intel Mobii project using Face Recognition, at engadget.com (June 2014) <http://www.engadget.com/2014/06/25/ford-and-intel-project-mobii-connected-car-cameras/>
- Article on research of M. Valko's collaboration with INTEL - Ford prototype using Face Recognition at intel.com (June 2014) <http://www.intel.com/content/www/us/en/automotive/ford-mobii-prototype-video.html>
- as part of the Inria mediation program, Ph. Preux met high schools pupils to explain what research is.

BONSAI Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. general chair, scientific chair

- Proteomics for omics analysis, 2014/3/2, 35 people
- Integrative biology, 2014/17/12, 60 people

9.1.1.2. member of the organizing committee

- Polaris seminar series (M. Giraud)

9.1.2. Scientific events selection

9.1.2.1. member of the conference program committee

- RECOMB-seq (L. Noé, H. Touzet).
- ECCB'14 poster session (H. Touzet).
- SeqBio 2014 (H. Touzet).

9.1.2.2. reviewer

- Laurent Noé: AFL 2014.

9.1.3. Journal

9.1.3.1. reviewer

- Algorithms for Molecular Biology (L. Noé), Acta Biotheoretica (L. Noé), Bioinformatics (H. Touzet)

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

L. Noé, *Bioinformatics*, 54h, M1 (master “Génomique Protéomique”, univ. Lille 1)

L. Noé, *Networks*, 42h, L3 (licence “Computer science”, univ. Lille 1)

M. Pupin, M. Salson, *Introduction to programming (OCaml)*, 96h, L1 (licence “Computer science”, univ. Lille 1)

M. Salson, *Coding and information theory*, 63h, L2 (licence “Computer science”, univ. Lille 1)

J.-S. Varré *Web programming*, 36h, L2 (licence “Computer Science”, univ. Lille 1)

J.-S. Varré *Programming with Caml*, 36h, L2 (licence “Sciences for Engineers”, univ. Lille 1)

J.-S. Varré *Algorithms and Data structures*, 50h, L2 (licence “Computer science”, univ. Lille 1)

J.-S. Varré, *System*, 36h, L3 (licence “Computer science”, univ. Lille 1)

M. Salson, *C programming*, 42h, L3 (licence “Computer science”, univ. Lille 1)

M. Pupin, M. Salson *Bioinformatics*, 100h, M1 (master “Biology and Biotechnologies”, univ. Lille 1)

S. Blanquart, *Algorithms and applications in bioinformatics*, 24h, M1 (master “Computer Science”, univ. Lille 1)

V. Leclère *Bioinformatics*, 50h, M2 (master “Transformation Valorisation Industrielles des Agroressources”, univ. Lille 1)

M. Pupin, J.-S. Varré *Computational biology*, 30h, M2 (master “Modèles complexes, algorithmes et données”, univ. Lille 1)

S. Blanquart, *Methods in phylogenetics*, 4h, M2 (master “Ecology Environment”, univ. Lille 1)

M. Giraud, *Algorithms for RNA Analysis*, 12h, M2 (master “Bioinformatique et Modélisation”, univ. Paris 6)

M. Salson, *Skeptical thinking*, 14h, M2 (master “journalist and scientist”, univ. Lille1, ESJ)

J.-S. Varré, *ISN - Computer science for secondary school*, 20h, second-level teachers.

9.2.2. Supervision

PhD in progress: C. Vroland, Indexing data for microRNA and microRNA target site identification in genomes, 2012/10/01, H. Touzet, V. Castric (GEPV), M. Salson

PhD in progress: T. Rocher, Indexing VDJ recombinations in lymphocytes for leukemia follow-up, 2014/11/01, J.-S. Varré, M. Giraud, M. Salson

PhD in progress: P. Pericard, Methods for taxonomic assignation in metagenomics, 2013/11/01, H. Touzet, S. Blanquart.

PhD in progress: C. Saad, Caractérisation des erreurs de séquençage non aléatoires, application aux mosaïques et tumeurs hétérogènes, 2014/10/01, M.-P. Buisine, H. Touzet, J. Leclerc, L. Noé, M. Figeac

PhD in progress: Y. Dufresne, Modèles et algorithmes pour la gestion de la biodiversité des peptides non-ribosomiques et la mise en évidence de nouveaux peptides bioactifs, 2013/10/01, M. Pupin, L. Noé

PhD in progress: L. Siegwald, Bioinformatic analysis of Ion Torrent metagenomic data, 2014/01/03, H. Touzet, Y. Lemoine (Institut Pasteur de Lille)

9.2.3. Juries

- Member of the thesis committee of Jérémie Gilliot (Université Lille 1, J.-S. Varré)
- Member of the thesis committee of Trong-Tuan Vu (Université Lille 1, J.-S. Varré)
- Member of the thesis committee of Audrey Vingadassalon (Université Paris Sud, V. Leclère)
- Member of the thesis committee of Safwan Saker (Université de Toulouse, V. Leclère)
- Member of the thesis committee of Valentin Wücher (Université Rennes 1, H. Touzet)
- Member of the thesis committee Susan Higashi (Université Lyon 1, H. Touzet)
- Member of the thesis committee of Mateusz Pawlik (Freie Universität Bozen, H. Touzet)
- Member of the tenure committee of Sylvie Hamel (UQAM, H. Touzet)
- Member of the national Inria CR1 hiring committee (M. Giraud)
- Member of the CR2 hiring committee of Inria Rocquencourt (M. Giraud)
- Member of the McF 27MC1727 committee (Université Pierre et Marie Curie, L. Noé)
- Member of the McF 27/64, poste 0916 committee (Université de Reims, M. Pupin)
- Member of the hiring committee McF of Université Lyon 1 (H. Touzet)

9.2.4. Administrative activities

- National representative (*chargée de mission*) for the Institute for Computer Sciences (INS2I) in CNRS⁰. She is more specifically in charge of relationships between the Institute and life sciences (H. Touzet)

⁰CNRS: National Center for Scientific Research

- Member of the Inria evaluation committee (M. Giraud)
- Member of the Inria local committee for scientific grants (A. Ouangraoua)
- Member of the Inria local committee for technology development (M. Pupin)
- Member of the Gilles Kahn PhD award national committee (H. Touzet)
- Member of the national ANR evaluation committee CES19 (H. Touzet)
- Member of CSS MBIA (mathematics, bioinformatics and artificial intelligence) at INRA (H. Touzet)
- Member of the executive council of the IFB, Institut Français de Bioinformatique, (M. Pupin)
- Member of CUB Inria Lille Nord Europe (S. Blanquart).
- Head of PPF bioinformatics – University Lille 1 (H. Touzet)
- Head of Bilille, Lille bioinformatics platform (M. Pupin)
- Head of IFB-NE (pôle Nord-Est de l’Institut Français de Bioinformatique), a cluster of 4 bioinformatics platforms (M. Pupin)
- Member of UFR IEEA council (M. Pupin)
- Member of UFR Biologie council (V. Leclère)
- Head of the GIS department (Statistics and Computer Sciences) of Polytech’Lille (S. Janot)
- Head of the master “Transformation Valorisation Industrielles des Agro-ressources”, univ. Lille 1 (V. Leclère)
- Head of the master “Modèles complexes, algorithmes et données”, univ. Lille 1 (J.-S. Varré)
- Member of the ProBioGEM Laboratory council (V. Leclère)
- Member of the ProBioGEM scientific committee (V. Leclère)
- Member of the scientific operational committee of Xperium, Univ. Lille 1 (V. Leclère)
- Member of the LIFL Laboratory council (L. Noé, H. Touzet)
- Head of the thematic group "Modeling for Life Sciences" of CRISAL and member of the scientific council of CRISAL (J.-S. Varré)

9.3. Popularization

- We made seven presentations, using dedicated “genome puzzles” in high schools during the “Science week” to popularize bioinformatics.
- During a whole day in June we made presentations on bioinformatics with our “genome puzzles” to several groups of high school students.
- V. Leclère has created a demonstration stand for Xperium, part of the Learning center Innovation of Lille 1 University.

FUN Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. general chair, scientific chair

- Nathalie Mitton is/was general chair for AdHocNets 2014 and 2015 and IoT-IP 2014.
- Nathalie Mitton is demo chair for MobiCom 2015
- Valeria Loscri was publicity chair for IoT-IP 2014 and Wisarn 2014.
- Viktor Toldov is publicity chair for IndiaCom 2015.
- Riccardo Petrolo is publicity chair for AdHocNets 2015.

8.1.1.2. member of the organizing committee

- Valeria Loscri was organisation chair for SwanSity 2014.

8.1.2. Scientific events selection

8.1.2.1. responsible of the conference program committee

- Nathalie Mitton is/was program chair for AdHocNets 2014 and 2015 and IoT-IP 2014 and chair of special sessions at HPCC 2014 and IndiaCom 2015.
- Valeria Loscri is/was program chair for e-banet 2014, special track at BodyNets 2014.
- Dimitrios Zormpas was program chair of WAMN'14.

8.1.2.2. member of the conference program committee

- Nathalie Mitton is/was in the Technical Program Committee (TPC) for Algotel'14 and 2015, AWSN 2014 and 2015, WPMC'14, SecAN'14, WinSys 2014, BDA 2014, MDM 2014, SensorNets 2014 and NTMS 2014.
- Tahiry Razafindralambo is/was in the Technical Program Committee (TPC) for PE-WASUN 2014 and MSWIM 2014.
- Valeria Loscri is/was in the Technical Program Committee (TPC) for BodyNets 2015 and 2014, CSWD 2015 and 2014, ICARSC 2015, TENSYPMP 2015, ICC 2015, BodyNets 2014, IDCS 2014, WiMob 2014, MoWNet 2014, SwanSity 2014, WiSARN 2014, IoTip 2014, ICWMC 2014 and NTMS 2014.
- Karen Miranda is/was in the Technical Program Committee (TPC) for IndiaCom 2015 and WAMN 2014.

8.1.2.3. invited speaker in scientific event

- Nathalie Mitton was invited speaker at the French-India Architecture and Technological Trends and Issues in NGN event in New Delhi in April 2014.

8.1.3. Journal

8.1.3.1. member of the editorial board

- Nathalie Mitton is editorial board members of AHSWN since 2011.
- Nathalie Mitton is editorial board member of Adhoc Networks since 2012.
- Nathalie Mitton is editorial board member of IET-WSS since 2013.
- Nathalie Mitton is editorial board member of ComSoc MMTC e-letter since 2014.

- Nathalie Mitton co-edited the book "Wireless sensor and robot networks: from topology control to communication aspects", to be published in February 2014.
- Valeria Loscri is a member of the 'Research Group on IoT Communications and Networking Infrastructure' at ComSoc Communities.

8.1.3.2. reviewer

- Nathalie Mitton reviewed submissions for Elsevier Theoretical Computer Science, IET Communications, Wireless Communications and Mobile Computing, IEEE Communications letters, IEEE Wireless Communications Magazine, Elsevier Computer Communications (COM-COM), IEEE Transactions on Parallel and Distributed Systems (TPDS), Transactions on Sensors Networks, IEEE SENSORS, Elsevier Ad Hoc Networks.
- Valeria Loscri reviewed submissions for JCN, AD Hoc Networks, JNCA, IEEE Transactions on Nanotechnology, IEEE Transactions on Wireless Communications, IEEE TDPS, IEEE Sensors Journal, Elsevier COMCOM, COMNET.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Master : Nathalie Mitton, Wireless sensor networks, 36h eqTD (Master TIIR and MINT), Université Lille 1 and Telecom Lille 1, France

Master : Nathalie Mitton, RFID Middlewares, 16h eqTD, Institut Telecom and Université Lille 1, France

8.2.2. Supervision

PhD in progress: Riccardo Petrolo, Internet of Things and Smart Cities, Université Lille 1, 2013-2016, Nathalie Mitton and Valeria Loscri

PhD in progress: Viktor Toldov, : Interférence et consommation dans les réseaux de capteurs, Université Lille 1, 2013-2016, Nathalie Mitton and Laurent Clavier

PhD in progress: Natale Guzzo, Auto - organisation et économie d'énergie dans un réseau sans fil de surveillance de fret, Université Lille 1, 2013-2016, Nathalie Mitton

PhD in progress: Roudy Dagher, Géolocalisation en environnement réel, extérieur et intérieur avec réseau de capteurs, Université Lille 1, 2013-2016, Nathalie Mitton

PhD in progress: Mouna Rekik, geographic multi path routing protocol based on swarm intelligence for wireless sensor and actuator networks in the context of Smart Grids, co-supervision Université Lille 1 and University of Sfax (Tunisia), 2013-2017, Nathalie Mitton and Zied Chtourou

PhD in progress: Jean Cristanel Razafimandimby, Distributed Cooperation and Communication among Heterogeneous Devices, Université Lille 1, 2014-2017, Tahiry Razafindralambo and Valeria Loscri

8.2.3. Juries

- Nathalie Mitton was reviewer of the following PhD thesis:
 - Alhem Riggani, UPMC, Paris, January 2014
 - Arnab Sinha, Inria Rennes, February 2014
 - Rafik Kheddami, Esisar, Valence, February 2014
 - Yacine Benchaib, Institut Mines Telecom, March 2014
 - Hicham Laklhef, Université de Franche Comté, Montbéliard, November 2014
 - Ahmed Mokrane, UPMC, Paris, Décembre 2014
 - Jacques Bou Abdo, Institut Mines Telecom, December 2014

- Mario Antonio Gasperin Zancanaro, UPMC, January 2015
- Tahiry Razafindralambo was reviewer of the PhD thesis of Rivo S. A. Randriatsiferana, Université de La Réunion, St Denis, December 2014
- Nathalie Mitton was member of the CR2 Lille competition selection committee.

8.3. Popularization

- Nathalie Mitton gave a talk on "Introduction to RFID" to Terminales S a in the framework of "Fête de la Science".
- Nathalie Mitton gave a talk on "The new challenges of the next generation of wireless ubiquitous networks" to Rencontres Inria Industries in Nov. 2014 on Telecom.
- Nathalie Mitton gave a talk at the ProjectCity Forum in October 2014 in Lille.
- Nathalie Mitton gave a talk at the CAFFEET 2014 conference on IoT in Smart Factories in San Francisco in November 2014.
- Nathalie Mitton gave a talk at the EDF-Institut Telecom joint lab workshop on IoT in Smart Cities in Paris in December 2014.
- Nathalie Mitton was invited speaker at "La RFID - innovation responsable" event, march 2014, Paris.
- Nathalie Mitton was invited speaker at International Transportation System Forum in Lille in September 2014.
- Roudy Dagher gave a talk on "Introduction to Wireless Sensor Networks" in the framework of "Fête de la Science".
- Viktor Toldov gave a talk on "Introduction to Wireless Sensor Networks" in the framework of "Fête de la Science".
- Valeria Loscri gave a talk in the context of "30 minutes de sciences" at the Inria Lille - Nord Europe, May 2014.

RMOD Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. Member of the organizing committee

- Marcus Denker, Damien Cassou and Stéphane Ducasse were part of the organization of ESUG 2014.
- Damien Cassou co-organized Dyla'14 *Workshop on Dynamic Languages and Applications*

9.1.2. Scientific events selection

9.1.2.1. Member of the conference program committee

- Anne Etien
 - ECMFA 2014, *European Conference on Modelling Foundations and Applications*.
 - IWST 2014, *International Workshop on Smalltalk Technologies*.
 - ME 2014, *Models and Evolution*
 - SLE 2014, *International Conference on Software Language Engineering*.
 - Dyla'14, *Workshop on Dynamic Languages and Applications*
 - Inforsid 14 *Congrès INFORSID - INFormatique des ORganisations et Systèmes d'Information et de Décision*
- Damien Cassou
 - Dyla'14, *Workshop on Dynamic Languages and Applications*
- Stefan Marr
 - DLS 2014, *Dynamic Language Symposium*
 - 9th IC00LPS 2014 *Workshop Implementation, Compilation, Optimization of OO Languages, Programs and Systems*.
- Marcus Denker
 - IWST 2014, *International Workshop on Smalltalk Technologies*.
 - COP 2014, *ECOOP International Workshop on Context-Oriented Programming*
- Stéphane Ducasse declined the participation to ECOOP 2014 and ECOOP 2015.

9.1.2.2. Reviewer

- Damien Cassou: Apsec 2014 *The Asia-Pacific Software Engineering Conference*
- Martin Dias: ICSME 2014 *International Conference on Software Maintenance and Evolution*
- Andre Hora: ICSME 2014 and SANER 2014 *International Conference on Software Analysis, Evolution, and Reengineering*

9.1.3. Journal

9.1.3.1. Reviewer

- Anne Etien: *International Journal of Computer Aided Engineering and Technology (IJCAET)*
- Damien Cassou reviewed paper for SCP

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master: C. Demarey, Architectures Logicielles, 30h (M1), GIS4, Polytech'Lille, France
 Master: C. Demarey, Intégration Continue, 12h (M2), IAGL, Université de Lille 1, France
 Master : Damien Cassou, Conception des applications réparties, 42h, M1, Université Lille 1, France
 Licence : Damien Cassou, UV Info, 24h, L3, Telecom Lille, France
 Licence : Damien Cassou, Conception orientée objet, 57h, L3, Université Lille 1, France
 Master : Damien Cassou, Qualité logicielle, 30h, M2, Université Lille 1, France
 Master : Damien Cassou, CAL Tests et Maintenance, 12h, M2, Université Lille 1, France
 Master : Anne Etien, Système d'information objet, 22h, M1, Polytech-Lille, France
 Master : Anne Etien, Bases de données, 44h, M1, Polytech-Lille, France
 Master : Anne Etien, Bases de données Avancées, 12h, M1, Polytech-Lille, France
 Licence : Anne Etien, Bases de données, 22h, L3, Polytech-Lille, France
 Licence : Camille Teruel, Conception orientée objet, 36h, L3, Université Lille 1, France
 Licence : Damien Pollet, Programmation orientée objet, 85h, L3, Telecom Lille, France
 Licence : Damien Pollet, Systèmes Numériques (SNUM), 11h, L3, Telecom Lille, France
 Master : Damien Pollet, Ingénierie Logicielle (ILOG), 7h, M1, Telecom Lille, France
 Master : Damien Pollet, Technologies de Systèmes d'Information Ouverts (TSIO), 38h, M1, Telecom Lille, France
 Master : Damien Pollet, Spécification et Validation du Logiciel (SVL), 24h, M1, Université Lille 1, France
 Master : Damien Pollet, Services Réseaux (SER), 28h, M2, Telecom Lille, France
 Licence : Nicolas Anquetil, Interfaces et Conception Orientée Objets, 64h, L2, IUT-A/Université de Lille-1, France
 Licence : Nicolas Anquetil, Analyse et conception des systèmes d'information, 24h, L2, IUT-A/Université de Lille-1, France
 Licence : Nicolas Anquetil, stage, 6h, L2, IUT-A/Université de Lille-1, France
 Licence : Nicolas Anquetil, Projet tutoré, 16h, L2, IUT-A/Université de Lille-1, France
 Licence : Nicolas Anquetil, Conception et programmation objet avancées, 48h, L2, IUT-A/Université de Lille-1, France
 Licence : Nicolas Anquetil, Projet Modélisation mathématique, 16h, L2, IUT-A/Université de Lille-1, France
 Licence : Nicolas Anquetil, Introduction aux interfaces homme-machine, 32h, L2, IUT-A/Université de Lille-1, France
 Licence : Jean-Christophe Bach, Conception orientée objet, 42h, L3, Université Lille 1, France
 Master : Jean-Christophe Bach, Génie logiciel, 42h, M1, Université Lille 1, France
 Licence : Stéphane Ducasse, Cours IAE (2014), 14h, Annecy, France
 Master : Stéphane Ducasse, Cours Ecole des Mines de Douai (2014), 12h, France
 Master : Stéphane Ducasse, Cours USTL L3 (2014), 4.5h, Université Lille, France
 Licence : Stéphane Ducasse, Advanced Design, 6h, University of Delft, L3

9.2.2. Supervision

Camillo Bruni, Towards Self-aware Virtual Machines, 16/05/2014, Stéphane Ducasse, Marcus Denker.

Andre Hora, Assessing and Improving Rules to Support Software Evolution, 04/11/2014, Nicolas Anquetil, Stéphane Ducasse.

PhD in progress: Camille Teruel, Security for dynamic languages, 01/12/2012, Stéphane Ducasse, Damien Cassou

PhD in progress: Martin Dias, Supporting Merging, 03/12/2012, Damien Cassou, Stéphane Ducasse.

PhD in progress: Guillermo Polito, Isolation and Reflection in Dynamic Object Oriented Languages, 01/04/2012, Noury Bouraqadi, Luc Fabresse, Stéphane Ducasse.

PhD in progress: Marco Naddeo, Viviana Bono (Univerosty of Turin), Damien Cassou, Stéphane Ducasse, started 01/01/2014

PhD in progress: Vincent Blondeau, CIFRE Worldline, started Oct 2014, Anne Etien, Nicolas Anquetil.

PhD in progress: Brice Govin, CIFRE Thales, started Jan 2015, Anne Etien, Nicolas Anquetil, Stéphane Ducasse.

PhD in progress: Max Mattone: Updating programs at runtime, started Oct 2014 Noury Bouraqadi, Luc Fabresse, Stéphane Ducasse .

PhD in progress: Clement Bera: Evolvable Runtimes for a Changing World, started Oct 2014, Stéphane Ducasse, Marcus Denker.

9.2.3. Juries

- Nicolas Anquetil: Lisong Guo, LIP6 University Pierre and Marie Currie, 12/2014 (reviewer)
- Damien Cassou: Eyvind W. Axelsen, Oslo, 05/2014 (opponent)
- Stéphane Ducasse: *Une approche pragmatique pour mesurer la qualité des applications à base de composants logiciels*, Salma Hamza, Université de Bretagne Sud, France. 18/12/14. (referee)
- Anne Etien was in the mid term examination committee of the PhD thesis: Elie Richa 09/2014 (reviewer)

9.3. Popularization

- Marcus Denker gave two presentations about Pharo at the open source conference FOSDEM 2014.
- Damien Cassou gave a Pharo tutorial at PLDI' 14.
- RIC Day was held 23 September 2014 @ University of Lille 1, Lille, Anne Etien and Damien Pollet gave a presentation about Pharo, Moose and software maintenance.
- A Programming Dojo was organized by Christophe Demarey on Dec 1st.
- A hands-on course about Pharo for the students at Lille in November organized by Léo Perard and Stéphane Ducasse.
- Demo for industry at the Rencontres Inria-Industrie *Technologies du Web*, 26 Nov 2014 at EuraTechnologies - Lille.
- RMOD co-organized and participated at ESUG 2014.
- Multiple public Pharo Sprints in Lille.
- Stefan Marr gave a half-day tutorial on “Building Self-Optimizing Interpreters with Truffle or RPython” at the Software Composition Group, Universität Bern, Switzerland, December 2nd, 2014
- Stefan Marr gave an invited talk on “Building High-Performance Language Implementations with Low Effort” at Software Composition Group, Universität Bern, Switzerland, December 1st, 2014

- Stefan Marr gave an invited talk on “Zero-Overhead Metaprogramming: Using Self-Optimizing Interpreters to Remove the Runtime Cost of Reflective Programming” at the Software Languages Lab, Vrije Universiteit Brussel, Belgium, November 2014
- Stefan Marr gave an invited talk “On the Way to Concurrency without Accidental Complexity” at the Institut für Systemsoftware, JKU University Linz, Austria, July 2014
- Stefan Marr gave an invited talk on “Building VMs for Language Designers” at the Software Development Team of Laurence Tratt, King’s College London, May 2014
- Stefan Marr gave a talk on “How to get a JIT Compiler for Free?” in the Smalltalk Developer Room of the FOSDEM Open Source Conference, Brussels, Belgium, February 2014

SPIRALS Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. General chair, Scientific chair

Martin Monperrus has been General Chair of the 1st European Open Symposium on Empirical Software Engineering (**EOSESE'2014**), organized in Lille on June 30 2014.

Lionel Seinturier has been General Chair of the 17th ACM SIGSOFT International Conference on Component-Based Software Engineering and Software Architecture (**CompArch**) that has been held in Lille from 30 June to 3 July 2014.

9.1.1.2. Member of the organizing committee

Laurence Duchien, **Martin Monperrus** and **Romain Rouvoy** have been members of the organisation committee of the ACM SIGSOFT 17th International Conference on Component-Based Software Engineering and Software Architecture (**CompArch**) that has been held in Lille from 30 June to 3 July 2014.

9.1.2. Scientific events selection

9.1.2.1. Responsible of the conference program committee

Romain Rouvoy has been Poster Chair of the 15th ACM/IFIP/USENIX International Middleware Conference (**Middleware**).

Romain Rouvoy is member of the Steering Committee of the IFIP International Conference on Distributed Applications and Interoperable Systems (**DAIS**).

Lionel Seinturier has been Program Committee co-chair of the 3rd International Workshop on Advanced Information Systems for Enterprises (**IWAISE**).

9.1.2.2. Member of the conference program committee

Laurence Duchien

International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS)

Track on Software Engineering In Practice (SEIP) at International Conference on Software Engineering (ICSE)

International Workshop on Software Engineering Research and Industrial Practices (SER&IPs)

International Track on Adaptive and Reconfigurable Service-oriented and component-based Applications and Architectures (AROSA) at the IEEE International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE)

International Conference on Software Maintenance and Evolution

European Conference on Software Architecture (ECSA)

International Software Product Line Conference (SPLC)

Philippe Merle

Middleware Workshop on Cloud Brokers

International Workshop on Cloud Security and Cryptography (CloudCrypto)

IEEE INFOCOM Workshop on Cross-Cloud Systems (CrossCloud)

International Workshop on Adaptive and Reflective Middleware (ARM)

Conférence en Ingénierie du Logiciel (CIEL)

Filip Krikava

Transformation Tool Contest (TTC) of the Software Technologies: Applications and Foundations (STAF)

Martin Monperrus

Track on New Ideas and Emerging Results Track (NIER) at the International Conference on Software Engineering (ICSE)

International Symposium on Search Based Software Engineering (SSBSE)

Asia-Pacific Software Engineering Conference (APSEC)

Romain Rouvoy

ACM/IFIP/USENIX Middleware Conference (Middleware)

International Conference on Ambient Systems, Networks and Technologies (ANT)

Track on Dependable and Adaptive Distributed Systems (DADS) of the ACM Symposium on Applied Computing (SAC)

Track on Software Engineering Aspects of Green Computing (SEGC) of the ACM Symposium on Applied Computing (SAC)

International Workshop on Middleware for CyberPhysical Systems (MW4CPS)

International Workshop on Middleware for Next Generation Internet Computing Workshop (MW4NG)

International Workshop on Adaptive and Reflective Middleware (ARM)

International Workshop on Adaptive Services for the Future Internet (WAS4FI)

International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)

International Workshop on Big Data Management for the Internet-of-Things (BIOT) at COMPSAC

International Workshop on Green in Software Engineering, Green by Software Engineering (GIBSE) at the International Conference on Modularity (Modularity)

French Conference on Systems, Architecture and Parallelism (ComPAS)

Lionel Seinturier

Working IEEE/IFIP Conference on Software Architecture (WICSA)

Track on Model-based development, Components and Services (MOCS) at the Euromicro Conference series on Software Engineering and Advanced Applications (SEAA)

IEEE International Symposium on Software Crowdsourcing (ISCC)

Track on Software Engineering Aspects of Green Computing (SEGC) of the ACM Symposium on Applied Computing (SAC)

International Workshop on Middleware for CyberPhysical Systems (MW4CPS)

IEEE International Conference on Service Oriented Computing & Applications (SOCA)

Workshop on Distributed Architecture modeling for Novel component based Embedded systems (DANCE) at the ACM/IFIP/USENIX Middleware Conference (Middleware)

International Workshop on Model-Driven Engineering for Component-Based Software System (ModComp)

IFIP International Conference on Distributed Applications and Interoperable Systems (DAIS)

Australasian Software Engineering Conference (ASWEC)

International Conference on Ambient Systems, Networks and Technologies (ANT)

International Workshop on Green in Software Engineering, Green by Software Engineering (GIBSE) at the International Conference on Modularity (Modularity)

Track on Formal Verification of Service Based Systems (FVSBS) at the IEEE International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE)

International Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS)

9.1.2.3. Reviewer

Philippe Merle

European Conference on Software Architecture (ECSA)
Track on Software Engineering In Practice (SEIP) at the International Conference on Software Engineering (ICSE)

Jifeng Xuan

IEEE International Conference on Software Engineering (ICSE)
Asia-Pacific Software Engineering Conference (APSEC)
International Conference on Quality Software (QSIC)
IEEE International Conference on Software Maintenance and Evolution (ICSME)

9.1.3. Journal

9.1.3.1. Member of the editorial board

Laurence Duchien is member of the editorial board of Lavoisier Technique et Science Informatiques (TSI).

Lionel Seinturier is editor for software engineering of the ISTE-Wiley Computer Science and Information Technology book collection. He has been co-editor of the special issue on "Greening Distributed Systems" of the Springer Journal of Internet Services and Applications (JISA).

9.1.3.2. Reviewer

Laurence Duchien: Elsevier Future Generation Computer Systems, ACM Transactions on Autonomous and Adaptive Systems, IEEE Software.

Philippe Merle: Elsevier Journal of Systems and Software (JSS), Springer Journal of Internet Services and Applications (JISA), The Scientific World Journal, Special issue "Ingénierie du logiciel" of Lavoisier Technique et Science Informatiques (TSI).

Martin Monperrus: Elsevier Journal of Systems and Software (JSS), IEEE Software, IEEE Transactions on Software Engineering (TSE), Springer Empirical Software Engineering, Wiley Journal of Software: Evolution and Process.

Romain Rouvoy: IEEE Transactions on Network and Service Management (TSNM), IEEE Software, IEEE Internet of Things Journal, IEEE Communications Magazine, Lavoisier Technique et Science Informatiques (TSI), Journal of Universal Computer Science (JUICS), Journal of Network and Computer Applications (JNCA), Elsevier Computer Communications (COMCOM).

Lionel Seinturier: IEEE Software, Elsevier Science and Computation, The Computer Journal, MDPI Sensors, Springer Software Quality Journal, Elsevier Sustainable Computing, Annals of Telecom, Wiley Software Practice and Experience, Lavoisier TSI.

Jifeng Xuan: Elsevier Science of Computer Programming (SCP).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Laurence Duchien teaches at the University of Lille 1, IEEA faculty. She heads the **research program** in Master of Computer Science at University Lille 1. She heads the Carrières et Emplois service and is referent for the professional insertion in the PhD program in Computer Science at PRES University Lille Nord de France. She is also Director of Doctoral Studies for Computer Science in Doctoral School Engineering Science (SPI) - COMUE Lille Nord de France.

Software Project Management, 50h, Level M2, Master MIAGE,
Design of distributed applications, 42h, Level M1, Master of Computer Science,
Software Product Lines, 8h, Level M2, Master of Computer Science,
Research and Innovation Initiation, 22h, Level M2 IAGL, Master of Computer Science,
Tutoring Internship, 16h, Level M2, Master of Computer Science.

Martin Monperrus teaches at the University of Lille 1, IEEA faculty.

Introduction to programming, 48h, Level L1, Licence of Computer Science,
 Object-oriented design, 39h, Level L3, Licence of Computer Science,
 Automated software engineering, 40h, Level M2 IAGL, Master of Computer Science.

Romain Rouvoy teaches at the University of Lille 1, IEEA faculty. He heads the **IAGL** specialty of the Master of Computer Science at the University Lille 1. He supervises the **Agil-IT** Junior Enterprise.

Conception d'Applications Réparties, 42h, Level M1, Master of Computer Science,
 Infrastructures et Frameworks Internet, 32h, Level M2 IAGL, Master of Computer Science,
 Innovation & Initiation à la Recherche, 14h, Level M2 IAGL, Master of Computer Science special-
 ity,
 Outils pour la Programmation des Logiciels, 12h, Level M2 IAGL, Master of Computer Science,
 Suivi de projets, 20h, Level M2, Master of Computer Science,
 Suivi d'alternants, 20h, Level M2, Master of Computer Science.

Walter Rudametkin teaches at the University of Lille 1, Polytech engineering school.

GIS4 Programmation par Objets
 GIS4 Architectures Logicielles
 GIS2A3 (apprentissage) Projet programmation par Objet
 IMA2A4 (apprentissage) Conception Modélisation Objet
 GBIAAL4 Bases de données

Lionel Seinturier teaches at the University of Lille 1, IEEA faculty.

Conception d'Applications Réparties, 18h, Level M1, Master of Computer Science,
 Infrastructures et Frameworks Internet, 6h, Level M2 E-Services and TIIR, Master of Computer
 Science.

E-learning

: Lionel Seinturier, Infrastructure et frameworks Internet, 10 semaines, plate-forme Corolia
 formation, Telecom Lille & Université Lille 1, niveau Bac+5, formation continue, 12
 inscrits par session

9.2.2. Supervision

Defended HdR: Romain Rouvoy, Contributions to the Autonomy of Ubiquitous Software Systems,
 University Lille 1, 5 December 2014

Defended PhD: Alexandre Feugas, Une approche agile, fiable et minimale pour le maintien de la
 qualité de service lors de l'évolution d'applications à base de processus métiers, 8 October 2014,
 Laurence Duchien & Sébastien Mosser (University Nice Sophia-Antipolis).

Defended PhD: Nicolas Haderer, APISENSE®: a distributed platform for deploying, executing and
 managing data collection campaigns using smart devices, 5 November 2014, Lionel Seinturier &
 Romain Rouvoy.

Defended PhD: Matias Martinez, Extraction and Analysis of Knowledge for Automatic Software
 Repair, 10 October 2014, Laurence Duchien & Martin Monperrus.

Defended PhD: Adel Noureddine, Towards a Better Understanding of the Energy Consumption of
 Software Systems, 19 March 2014, Lionel Seinturier & Romain Rouvoy.

Defended PhD: Fawaz Paraiso, soCloud : une plateforme multi-nuages distribuée pour la conception,
 le déploiement et l'exécution d'applications distribuées à large échelle, 18 June 2014, Lionel
 Seinturier & Philippe Merle.

Defended PhD: Clément Quinton, Cloud Environment Selection and Configuration: A Software Product Lines-Based Approach, 22 October 2014, Laurence Duchien.

In progress PhD: Maxime Colmant, Amélioration de l'efficacité énergétique des logiciels dans les systèmes multi-coeurs, October 2013, Lionel Seinturier & Romain Rouvoy.

In progress PhD: Benoit Cornu, Automated Runtime Software Repair, October 2012, Lionel Seinturier & Martin Monperrus.

In progress PhD: Maria Gomez Lacruz, Self-Optimization of Software Systems Driven by Wisdom of the Crowds, October 2013, Lionel Seinturier & Romain Rouvoy.

In progress PhD: Geoffrey Hecht, Auto-optimisation des architectures orientées services : Application aux applications mobiles et Cloud, October 2013, Laurence Duchien & Romain Rouvoy.

In progress PhD: Vincenzo Musco, Etude de la topologie et de l'évolution des graphes logiciels, October 2013, Philippe Preux (Inria SequeL) & Martin Monperrus.

In progress PhD: Marc Sango, Composants logiciels, boucle de contrôle et adaptation pour applications safety critical dans le domaine ferroviaire, October 2012, Laurence Duchien & Christophe Gransart.

In progress PhD: Gustavo Sousa, Towards dynamic software product lines to optimize management and reconfiguration of cloud applications, October 2012, Laurence Duchien & Walter Rudametkin.

In progress PhD: Amal Tahri, Evolution logicielle multi-vues : des réseaux domestiques au Cloud, March 2013, Laurence Duchien.

In progress PhD: Bo Zhang, Elasticité spontanée des services et infrastructures dans le Cloud, October 2013, Lionel Seinturier & Romain Rouvoy.

9.2.3. *Juries*

Laurence Duchien

Boris Baldassari (University Lille 3), chair
Calvante Hora André (University Lille 1), chair
Koutheir Attouchi (University Paris 6), reviewer
Cédric Teyton (University of Bordeaux), reviewer
Jean-Christophe Bach (University of Lorraine), reviewer
Jonathan Michaux (Telecom ParisTech), reviewer
Hamza Samih (University Rennes 1), reviewer
Alexandre Feugas (University Lille 1), director
Matias Martinez (University Lille 1), director
Clément Quinton (University Lille 1), director

Philippe Merle

Fawaz Paraiso (University Lille 1), co-supervisor

Martin Monperrus

Boris Baldassari (University Lille 3), examiner
Alexandre Bartel (University of Luxembourg), co-supervisor
Matias Martinez (University Lille 1), co-supervisor

Romain Rouvoy

Keling Da (University of Pau et des Pays de l'Ardour), examiner
Adel Noureddine (University Lille 1), co-supervisor
Nicolas Haderer (University Lille 1), co-supervisor
Yunbo Li (University of Nantes), member of the comité de suivi de thèse

Lionel Seinturier

HDR Xavier Bonnaire (University Paris 6), chair

HDR Yvan Peter (University Lille 1), chair

HDR Walid Gaaloul (University Paris 6), reviewer

HDR Nicolas Anquetil (University Lille 1), examiner

HDR Romain Rouvoy (University Lille 1), examiner

Nadia Elouali (University Lille 1), chair

Mohamed Amroune (University of Toulouse), reviewer

Etienne Gandrille (University of Grenoble), reviewer

Soguy Gueye (University of Grenoble), reviewer

Loïc Letondeur (University of Grenoble), reviewer

Julien Richard-Foy (University Rennes 1), reviewer

Nicolas Haderer (University Lille 1), director

Adel Noureddine (University Lille 1), director

Fawaz Paraiso (University Lille 1), director

Nour Assy (Telecom SudParis), member of the comité de suivi de thèse

Anca Iordache (University Rennes 1), member of the comité de suivi de thèse

9.3. Popularization

Lionel Seinturier has participated in October to the event Chercheur itinérant organized by the Inria Lille Nord Europe research center in the context of La Fête de la science. Two classes (3ème and 1ère) have been visited. The theme of the visit was crowdsensing and data gathering from mobile devices.

Walter Rudametkin has given some demonstrations at two major open source events: the Open World Forum in October in Paris, and Fossa in November in Rennes.

Loïc Huertas and **Maxime Colmant** have presented in November the PowerAPI software library (see Section 5.3) at the **GreenCodeLab** that is a challenge for the design of sustainable software

Loïc Huertas has given a demonstration of the PowerAPI software library (see Section 5.3) at the RIC day in September. The event targets students from computer science master programs and engineering schools.

The team has participated to three Inria organized events in relation with the industry: in January in Rennes for the Imatch event with the software industry (Clément Quinton, Loïc Huertas, Philippe Merle, Romain Rouvoy, Christophe Ribeiro, Daniel Romero Acero, Lionel Seinturier), in November in Rocquencourt for the RII Telecom du futur (Christophe Ribeiro), in November in Lille for the RII Web technologies (Philippe Merle, Christophe Ribeiro, Romain Rouvoy).

LINKS Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. General chair, scientific chair

Sophie Tison is in the scientific committee of RTA (Rewriting Techniques and Applications) and STACS (Symposium on Theoretical Aspects of Computer Science). She is also in the editorial committee of RAIRO-ITA (Theoretical Informatics and Applications).

8.1.2. Scientific events selection

8.1.2.1. Member of the conference program committee

Joachim Niehren was member of the program committees of LATA (International Conference on Language and Automata Theory and Applications) 2015, WPTE (Rewriting Techniques for Program Transformations and Evaluation) 2015, STACS (Symposium on Theoretical Aspects of Computer Science) 2014 and WPTE (Rewriting Techniques for Program Transformations and Evaluation) 2015.

Iovka Boneva was member of program committee ABDIS (East-European Conference on Advances in Databases and Information Systems) 2014

Angela Bonifata was member of the program committees of VLDB (Very large Database Conference) 2014 and 2015, EDBT (International Conference on Extending Database Technology) 2014, SIGMOD (International conference in Data Management) 2014, ICDT (International Conference on Database Theory) 2014 and 2015 and ICDE (International Conference of Data Engineering) 2015.

Slawomir Stawork is member of the program committees of WebDB (International Workshop on the Web and Databases) 2014.

8.1.3. Journal

8.1.3.1. Reviewer

The members of the team reviewed papers in numerous journal papers such as Journal of ACM, TODS, TKDE, PVLDB, Information System, Information and Computation.

8.1.4. Scientific Responsibilities

S. TISON is head of the computer science lab in Lille (LIFL). She is elected member of the “Comité National de la Recherche Scientifique (CoNRS)” (Section 6). She was president of the scientific and technical council of the cluster “Pôle de Compétitivité Industries du commerce” until June 2014. and she is member of the administrative board of the cluster Pictanovo. She have been elected member of the Administrative committee of University of Lille 1 since September 2014 She was member of the evaluation committee AERES IRIT.

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

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

License: Angela Bonifati, Introduction to Databases, 54h, L3, Université Lille 1, France
 Master (Mocad): Pierre Bourhis Information extraction, 18h, M2, Université Lille 1, France
 Master (Mocad): A. Bonifati Information extraction, 18h, M2, Université Lille 1, France
 Master : S. Tison Advanced algorithms and complexity, M1, 57h, Université Lille 1, France
 Master : S. Tison, Fouille de données, M1, 30h, Université Lille 1, France
 Master: A. LEMAY, XML Technologies, 16h, M2, Université Lille 3, France
 DUT : Iovka Boneva, 100h, Université Lille 1, France

Angela Bonifati is the co-responsible of the Master MOCAD of the University of Lille1.

Aurélien Lemay is pedagogical responsible for Computer Science and numeric correspondent for UFR LEA Lille 3.

8.2.2. Supervision

PhD : A. M. NDIONE, Probabilistic algorithms for tree automata and transducers. Since Sept. 2010. 16th April 2014. Supervised by Niehren and Lemay
 PhD: G. LAURENCE, Normalisation et Apprentissage de Transformations d' Arbres en Mots. Since Sept 2010 4th June 2014 Supervised by Niehren and Lemay and Staworko.
 PhD in progress : R.CIUCANU, Cross-model queries and schema mappings: evaluation and learning. Since Sept. 2012. Supervised by Bonifati.
 PhD in progress : T. SEBASTIAN, Streaming algorithms for XSLT. Since May 2011. Supervised by Niehren.
 PhD in progress: A. BOIRET, Top-down tree transformations with look-ahead : foundations and learning. Since Sept. 2011. Supervised by Niehren and Lemay.

8.2.3. Juries

HDR: Joachim Niehren was reviewer of the HDR of Pierre Senellart (Institut Télécom Paris-Tech) and comity member of Agata Savary (University of Blois).

Sophie Tison was reviewer for the HDR of E. Contejean (University South Paris) and M. Morvan (University East Paris). She was a member of the committy of B. Ben Amor.

PhD:

Joachim Niheren was president of the jury of Evguenia Kopylova and Antoine Thomas.

Angela Bonifati was member of the jury of Ioana Ileana.

Sophie Tison was reviewer of the PhD of J. Amavi and member of the jury of A. Ndione, R. Auguste, A. Aissaoui and O. Rihawi.

Slawomir Staworko was member of the Jury of Jean Decoster.

Selection Comity :

Iovka Boneva was member of the selection comity for Junior Researcher (CR2) Inria Saclay

Sophie Tison was member of Selection comity for Professor at Lille1, and Associate Professor at Lens and Marseille. She was also in the Evaluation Comity of for the pre-proposition of ANR and member of the jury IUF senior 2014.

Pierre Bourhis was member of a comity selection for Associate Professor at Rennes.

8.3. Popularization

The team has participated at "Journée RIC " of University Lille 1. In particular, Angela Bonifati, Radu Ciucianu and Tom Sebastian presented two demonstrations related to and X-Fun.

MAGNET Team

9. Dissemination

9.1. Promoting Scientific Activities

PASCAL DENIS served as member of the program committee of ACL 2014, COLING 2014, EACL 2014, and EMNLP 2014.

RÉMI GILLERON served as member of the program committee of CAP'2014.

MARC TOMMASI served as member of the program committee of CAP'2014.

FABIEN TORRE served as member of the program committee of ICPRAM 2015, EGC 2015, CluCo 2015, ECAI 2014, ICPRAM 2014.

9.1.1. Reviewer

MIKAELA KELLER served as member of the program committee of NIPS 2014 and CAP'2014, of the scientific committee reviewing Digiteo post-doctoral grant proposal.

MIKAELA KELLER was also reviewer for EGC 2015.

FABIO VITALE was reviewer for NIPS 2014.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master MOCAD: PASCAL DENIS, Extraction d'information, 18h, M2, Université Lille 1, France

Master MOCAD: DAVID CHATEL, Extraction d'information, 3h30, M2, Université Lille 1, France

Master MIASHS: RÉMI GILLERON, Bases de données avancées, 24h, M1, Université de Lille, France

Master MIASHS: RÉMI GILLERON, Programmation R (1), 24h, M1, Université de Lille, France

Master MIASHS: RÉMI GILLERON, Programmation R (2), 24h, M1, Université de Lille, France

Master MIASHS: RÉMI GILLERON, Algorithmes de fouille de données, 36h, M1, Université de Lille, France

Licence MIASHS: RÉMI GILLERON, Programmation Python, 36h, L1, Université de Lille, France

Licence : MIKAELA KELLER, Introduction to computer science and programming, 46h, L1 and L2, Université Lille 3, France

Licence : MIKAELA KELLER, Introduction to Statistical Learning, 54h, L3, Université Lille 3, France

Licence : MIKAELA KELLER, C2i, 55h, L2-L3, Université Lille 3, France

Licence MIASHS: MARC TOMMASI, Réseaux, 64h, L1 and L2, Université de Lille, France

Licence MIASHS: MARC TOMMASI, Programmation client, 24h, L2, Université de Lille, France

Licence : MARC TOMMASI, C2i, 25h, L2, Université de Lille, France

Licence : MARC TOMMASI, Culture numérique, 30h, L2, Université de Lille, France

Master : FABIEN TORRE, langages statiques du web, 37h, M1, Université Lille 3, France

Master : FABIEN TORRE, algorithmique et programmation php pour le web, 75h, M1, Université Lille 3, France

Master : FABIEN TORRE, algorithmique et programmation pour l'extraction d'information, 55h, M2, Université Lille 3, France

Master : FABIEN TORRE, javascript langage dynamique du web, 38h, M2, Université Lille 3, France

Licence : FABIO VITALE, C2i, 25h, L1, Université Lille 3, France

Licence MIASHS (SHS) : FABIO VITALE, Intelligence Artificielle, 31h30, L2, Université Lille 3, France

Master MIASHS (SHS) : FABIO VITALE, Classification non supervisée, 30h, M1, Université Lille 3, France

Licence SHDS (SHS) : FABIO VITALE, TICE, 18h, L1, Université Lille 3, France

Licence SQ (SHS) : FABIO VITALE, Algorithmique de graphes, 19h, L3, Université Lille 3, France

FABIEN TORRE teaches a course at EPAT 2014 (École de Printemps sur l'Apprentissage artificiel) on Machine Learning Collaborative Methodes.

RÉMI GILLERON is in charge of Master Mathématiques et Informatique Appliquées aux Sciences Humaines et Sociales (MIASHS) at Université de Lille.

MARC TOMMASI is a member of the "conseil de l'UFR MIME".

FABIEN TORRE is "secrétaire du CHSCT (Comité hygiène, sécurité et conditions de travail) de Lille 3" since Dec. 2012.

9.2.2. Supervision

PhD: THOMAS RICATTE, Hypernode graphs : a new data structure for higher order learning, Université Lille 3, since May 2011, defense scheduled for Jan. 2015, RÉMI GILLERON

PhD in progress: DAVID CHATEL, Supervised Spectral Clustering and Information Diffusion in Graphs of Texts, Université Lille 1, since Sept. 2012, PASCAL DENIS and MARC TOMMASI

PhD in progress: PAULINE WAUQUIER, Recommendation in Information Networks, Université Lille 1, since Dec. 2013 supervised by MARC TOMMASI and MIKAELA KELLER

PhD: Jean Decoster, Programmation logique inductive pour la classification et la transformation de documents semi-structurés, Université Lille 1, since Sept. 2009, defense on July 2014, FABIEN TORRE, RÉMI GILLERON and SLAWOMIR STAWORKO

PhD in progress: EMMANUEL LASSALLE, Improved Coreference Resolution with Feature Space Learning, Université Paris-Diderot, since Sept. 2010, PASCAL DENIS and LAURENCE DANLOS (Université Paris-Diderot)

PhD in progress: CHLOÉ BRAUD, Discourse Relation Identification from Labeled and Unlabeled Data, Université Paris-Diderot, since Sept. 2011, PASCAL DENIS and LAURENCE DANLOS (Université Paris-Diderot)

Master in progress: MATHIEU DEHOUCK, Propagating structured labels for Dependency Parsing, Université Lille 1, supervised by PASCAL DENIS

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).

MARC TOMMASI wrote a report for the Phd thesis of Daniel Bernades ("LIP6", France).

9.2.3. Juries

MIKAELA KELLER was a member of the following selection/hiring committees: PhD committee of J.P. Peyrache, Université de St Etienne (France), MdC hiring committees at Université Paris-Sud, and MdC hiring committees at Université Paris 6 (France).

MARC TOMMASI was member of the following selection/hiring committees: UPMC (Paris 6): Professor, St Etienne (France): Assistant professor and Lille (France): Inria young researchers (CR2).

MARC TOMMASI was also reviewer for Crédit Impot Recherche.

FABIEN TORRE participated in the selection committees "COS" for the 27 MCF 0133 and 27 MCF 0470 position (spring 2014, Lens, France).

9.3. Popularization

MARC TOMMASI was invited to give seminars at (i) Inria Rennes and (ii) LiX Colloquium on data science.

MIKAELA KELLER was involved in "Fête de la science" as a "chercheur itinérant".

MINT Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Conference Organization

- **IHM** (Villeneuve d'Ascq, Oct 28-31): Géry Casiez & Thomas Pietrzak (General Chairs), Fanny Chevalier (Workshops Co-Chair), Alix Goguey (Student Volunteer Chair), Nicolas Roussel (Communication Chair)
- IEEE VIS, Paris, France: Fanny Chevalier (Arts Program Co-Chair)
- ACM UIST, Honolulu, USA: Géry Casiez (Poster Co-chair), Fanny Chevalier (Video Previews Co-Chair)
- ACM CHI, Toronto, Canada: Fanny Chevalier (Video Previews Co-Chair), Nicolas Roussel (Video Showcase Co-Chair)
- **FITG** (Tourcoing, May 13-14): Nicolas Roussel (scientific chair), Thomas Pietrzak
- Eurohaptics: Frédéric Giraud, Betty Semail

9.1.2. Program Committees

- ACM UIST: Fanny Chevalier
- ACM CHI: Fanny Chevalier, Thomas Pietrzak (works in progress)
- Eurohaptics: Thomas Pietrzak, Frédéric Giraud, Betty Semail
- 3DUI: Géry Casiez
- GRAPP: Laurent Grisoni
- International Workshop on Movement and Computing: Laurent Grisoni, Nicolas Roussel

9.1.3. Editorial boards

- IEEE Transactions on Haptics : Frédéric Giraud (Associate Editor)
- IEEE Transactions on Power Electronics: Betty Semail (Associate Editor)

9.1.4. Journal and Conference Reviewing

- IEEE Transactions on Visualization and Computer Graphics (TVCG): Fanny Chevalier
- IEEE Transactions on Haptics (ToH): Frédéric Giraud, Betty Semail
- ACM Transactions on Interactive Intelligent Systems: Fanny Chevalier
- Behaviour & Information Technology: Thomas Pietrzak
- HCI Journal: Géry Casiez
- ACM UIST: Nicolas Roussel, Laurent Grisoni
- ACM CHI: Géry Casiez, Fanny Chevalier, Nicolas Roussel, Laurent Grisoni
- ACM SIGGRAPH: Géry Casiez, Fanny Chevalier
- IEEE INFOVIS: Fanny Chevalier
- 3DUI: Laurent Grisoni
- ErgoIHM : Laurent Grisoni
- EuroHaptics: Laurent Grisoni
- Graphics Interface: Fanny Chevalier

9.1.5. Invited Expertises

- Agence d'évaluation de la recherche et de l'enseignement supérieur (AERES): Nicolas Roussel
- Agence Nationale de la Recherche (ANR): Fanny Chevalier, Thomas Pietrzak, Frédéric Giraud
- MITACS Accelerate Program: Géry Casiez, Fanny Chevalier, Frédéric Giraud
- FNRS (Fédération nationale de recherche scientifique, Belgique): Laurent Grisoni
- Conseil régional Aquitaine: Laurent Grisoni

9.1.6. Scientific Associations

- AFIHM, the French speaking HCI association: G. Casiez (president), S. Huot (member of the Executive Committee and of the Scientific Council), Thomas Pietrzak (member of the Executive Committee)

9.1.7. Hiring Committees

- Inria's acceptance jury for junior researcher positions: N. Roussel
- Inria Lille's eligibility jury for junior researcher positions: N. Roussel (president)
- Inria Saclay's eligibility jury for junior researcher positions: N. Roussel
- Université Paris-Sud, Comité de Sélection MCF 27ème section (Computer Science): Géry Casiez, Fanny Chevalier
- Université Nancy, Comité de sélection PR 63ième section (Electrical Engineering): Betty Semail
- Université de Compiègne, Comité de selection PR 63ième: Betty Semail (president)

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

IUT : Géry Casiez, Algorithmique, 80, niveau 1A, Bases de données, 24, niveau 1A, modélisation mathématique, 14, niveau 2A, Conception orientée objet, 24, niveau 2A, IHM, 77, niveau 2A, projets, 18, niveau 2A, Université Lille 1, France

Licence : Thomas Pietrzak, AEL : Automates et Langages, 36, niveau L3, Université Lille 1, France

Licence : Thomas Pietrzak, ASD : Algorithmes et Structures de Données, 36, niveau L3, Université Lille 1, France

Master : Géry Casiez, Thomas Pietrzak & Nicolas Roussel, IHM : Interaction Homme-Machine, (8h, 56h, 32h), niveau M1, Université Lille 1, France

Master: Géry Casiez & Fabrice Aubert; Multi-Touch Interaction, 24h, M1, Univ. Lille 1, Université Lille 1, France

Master : Frédéric Giraud: Power Electronics (40h) niveau M1, Université Lille1, France

Master : Géry Casiez, Fanny Chevalier, Laurent Grisoni & Thomas Pietrzak, NIHM : nouvelles Interactions Homme-Machine, (14h, 12h, 6h, 16h), 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 & Thomas Pietrzak, IHM et Interface à Gestes, (24, 12h), niveau M2 (IMA5), Polytech Lille, France

Master : Géry Casiez & Thomas Pietrzak, 3DETech : 3D Digital Entertainment Technologies, (?, 10.5h), niveau M2, Télécom Lille, France

Introduction to HCI, haptics and computer graphics, 24h, Ecole Centrale de Lille (G2): N. Roussel

9.2.2. Supervision

- PhD in progress : Amira Chalbi, “Understanding and designing animations for graphical user interfaces”, Univ. Lille 1, started October 2014, co-advised by N. Roussel and F. Chevalier
- PhD in progress: Alix Goguey, “Interacting between physical and digital tools”, Univ. Lille 1, started October 2013, co-advised by G. Casiez and T. Pietrzak
- PhD in progress: Andéol Evain, “Smart user interfaces based on BCI”, Univ. Rennes 1, started September 2013, co-advised by A. Lecuyer (in Rennes), G. Casiez and N. Roussel
- PhD in progress: Jonathan Aceituno, “Designing the ubiquitous desktop”, Univ. Lille 1, started October 2011, advised by N. Roussel
- PhD in progress: Sofiane Ghenna, “multimodal control of piezoelectric actuators”, Univ. Lille 1, started October 2013, co-advised by F. Giraud and C. Giraud-Audine
- PhD in progress: Eric Vezzoli, “friction control techniques for tactile rendering”, started September 2013, advised by B. Semail
- PhD in progress: Thomas Sednaoui started September 2013, co-advised by B. Semail and C. Chappaz
- Yosra Rekkik, “Multi-finger gestural interaction”, Univ. Lille 1, co-advised by L. Grisoni and N. Roussel, defended December 10th 2014
- Jérémie Gilliot, “Interactions multi-points indirectes sur grands écrans”, Univ. Lille 1, co-advised by N. Roussel and G. Casiez, defended February 26th
- Farzan Kalantari, “shape feedback interaction devices”, Univ. Lille 1, started oct. 2014, co-advised by L. Grisoni and F. Giraud.
- Frederic Largillère, “Soft robots”, Univ. Lille 1, started oct 2013, co-advised by L. Grisoni and C. Duriez (SHACRA/DEFROST team)
- Vincent Gouezou, “architects and tools”, ANMA Architect cabinet (CIFRE funding)/Lille 3, co-advised by L. Grisoni and F. Vermandel (ecole d’architecture de Lille)

9.2.3. Juries

- Arnaud Hamon, PhD (Univ. de Toulouse, December): Nicolas Roussel (reviewer)
- Anthony Talvas, PhD (Univ. Rennes 1, December): Géry Casiez (reviewer)
- David Bertolo, PhD (Univ. Lorraine, November): Géry Casiez (reviewer)
- Jean-Luc Vinot, PhD (Univ. Toulouse 3, November): Géry Casiez (reviewer)
- Liuqing Wang (Insa de Lyon, November): Frédéric Giraud (reviewer)
- Olivier Beaudoux, HDR (Univ. d’Angers, August): Nicolas Roussel (reviewer)
- Christophe Winter (EPF Lausanne - Suisse) : Betty Semail (reviewer)
- Jérémie Garcia, PhD (Univ. Paris-Sud, June): Nicolas Roussel (examiner)
- Guillaume Trannoy (ESPCI, April): Betty Semail (reviewer)
- Charles Hudin 2014 (ESPCI, march): Betty Semail (reviewer)
- Fabien Danieau, PhD (Univ. Rennes 1, January): Géry Casiez (reviewer)
- Simon Courtemanche, PhD (Univ. Grenoble, dec): Laurent Grisoni (reviewer)

9.3. Popularization

- Fête de la science (October), “chercheurs itinérants”: Jonathan Aceituno, Fanny Chevalier, Alix Goguey, Damien Marchal, Hanaë Rateau, Nicolas Roussel, Laurent Grisoni
- “30 minutes de science” (September): Fanny Chevalier
- Guest of the *Place de la toile* France Cultures radio program (March): Nicolas Roussel
- technical advising of “zoomachines” week-end (imaginarium, Tourcoing, nov. 2014): Laurent Grisoni