



RESEARCH CENTER
Lille - Nord Europe

FIELD

Activity Report 2017

Section Dissemination

Edition: 2018-02-19

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10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- E-G. Talbi (steering committee): PDCO'2017 7th IEEE Workshop Parallel Distributed Computing and Optimization, Orlando, USA, May 2017
- N. Melab: Chair of 5 simulation and HPC-related seminars at Lille 1 oct-dec. 2017 (CENAERO, Intel, e-xtream, CRIStAL, Labs of mechanics at Lille)
- L. Jourdan et al.: Summer school ATOM 2017, June 2017, Lille, France

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

- E-G. Talbi: Track chair “Metaheuristics and machine learning”, MIC’2017 Metaheuristics International Conference, Barcelona, Spain, July 2017

10.1.2.2. Member of the Conference Program Committees

- IEEE Congress on Evolutionary Computation (CEC), San Sebastián, Spain, June 5-8, 2017
- The ACM Genetic and Evolutionary Computation Conference (GECCO), Berlin, Germany, July 15-19, 2017
- 12th Metaheuristics International Conference (MIC), Barcelona, Spain, July 4-7, 2017
- The 2017 International Conference on High Performance Computing & Simulation (HPCS), Genoa, Italy, July 17–21, 2017
- IEEE Intl. Workshop on Parallel/Distributed Computing and Optimization (IPDPS/PDCO), Orlando, Florida, USA, May 23-27, 2017
- 9th Intl. Conf. on Intelligent Networking and Collaborative Systems (INCoS), Track: Nature-inspired parallel collaborative systems, Ryerson University, Canada, August 24-26, 2017
- Colloque sur l’Optimisation et les Systèmes d’information (COSI), Bouira, Algérie, May 14-16, 2017
- The 3rd Intl. Conf. on Cloud Computing Technologies and Applications (CloudTech), Rabah, Morocco, Oct 24-26, 2017
- 6th Int. Conf. on Advances in Computing Communication and Informatics ICACCI’17, Manipal, India, Sept 2017
- ROADEF’2017 18ème Conférence de la Société Française de Recherche Opérationnelle et Aide à la Décision, Metz, France, Fev 2017
- EvoCOP’2017, European Conference on Evolutionary Computation in Combinatorial Optimization, Amsterdam, Netherlands, Apr 2017
- ACM GECCO’2017 (Genetic and Evolutionary Computation Conference), Berlin, Germany, July 2017
- IEEE PDCO Parallel and Distributed Computing and Optimization in IPDPS’2017, Orlando, USA, May 2017
- MIC’2017, Metaheuristics International Conference, Barcelona, Spain, July 2017

- IJCCI'2017 8th International Joint Conference on Computational Intelligence, Madeira, Portugal, Nov 2017
- EvoCOP'2017, European Conference on Evolutionary Computation in Combinatorial Optimization, Amsterdam, Netherlands, Apr 2017
- ACM Student Workshop in GECCO'2017 (Genetic and Evolutionary Computation Conference), Berlin, Germany, July 2017
- IESM'2017 Int. Conf. on Industrial Engineering and Systems Management, Saarbrucken, Germany, Sept 2017
- EA'2017 Int. Conference on Artificial Evolution, Paris, France, Nov 2017
- MOPGP'2017 Int. Conference on Multiple objective Programming and Goal Programming, Metz, France, 2017
- IEEE CEC 2017

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- E-G. Talbi : Editor of the Journal « Computers and Industrial Engineering (CAIE, Elsevier)» Area «Computational Intelligence»
- N. Melab: Guest and Managing Editor (in collaboration with A. Zomaya and I. Chakroun) of a special on Parallel Optimization using/for Multi and Many-core High Performance Computing in Journal of Parallel and Distributed Computing (JPDC), 2016-2017
- L. Jourdan: Review Editor Frontiers in Big Data

10.1.3.2. Reviewer - Reviewing Activities

- IEEE Transactions on Evolutionary Computation, Evolutionary Computation, Journal of Heuristics, Artificial Intelligence Journal
- Applied Soft Computing
- Computers in Biology and Medicine
- Computers & Industrial Engineering
- Computers & Operations Research
- EJOR European Journal of Operational Research
- IEEE Transaction on Evolutionary Computation
- International Journal of Metaheuristics
- International Journal of Molecular Sciences
- International Journal of Production research
- International Transactions in Operational
- JOH Journal of Heuristics
- JOCO Journal of Combinatorial Optimization
- JPDC Journal of Parallel and Distributed Computing
- Nature Scientific Report
- Soft Computing (SOCO)
- Transactions on Computational Biology and Bioinformatics
- ACM Computing Surveys
- Computation and Concurrency: Practice and Experience (CCPE)
- Parallel Processing Letters
- Parallel Computing

- Journal of Parallel and Distributed Computing (JPDC)
- 4OR: A Quarterly Journal of Operations Research (Springer)
- ASOC: Applied Soft Computing (Elsevier)
- CAIE: Computers & Industrial Engineering (Elsevier)
- ITOR: International Transactions in Operational Research (Wiley)
- NEUCOM: Neurocomputing (Elsevier)
- Discrete Optimization
- Annals of Operations Research
- RAIRO - Operations Research

10.1.4. Invited Talks

- E-G. Talbi: Multi-objective optimization under uncertainty, Keynote presentation, Business Clouds'2017, Luxembourg, Jan 2017.
- E-G. Talbi: Matheuristics, Invited presentation, Universidad Elche, Spain, April 2017
- E-G. Talbi: Multi-objective metaheuristics, Invited presentation, University of Catania, Catania, Italy, April 2017
- E-G. Talbi: Optimization of smart grids: opportunities and directions, Keynote speaker ICOA'2017, International Workshop on Optimization and Applications, Kenitra, Morocco, April 2017
- E-G. Talbi: Parallel and distributed metaheuristics, Invited tutorial, IEEE CEC Congress on Evolutionary Computation, San Sebastien, Spain, June 2017
- E-G. Talbi: Evolutionary multi-objective algorithms under uncertainty, Invited seminar, Jozef Stefan Institute , Ljubljana, Slovenia, Oct 2017
- E-G. Talbi: Smart grids: challenges and opportunities, Invited seminar, Ecole Centrale de Casablanca, Casablanca, Morocco, Nov 2017
- E-G. Talbi: Complex optimization problems in smart grids, Keynote speaker, Workshop MOSSYS'2017 Modélisation, Optimisation et Simulation des Systèmes, Rabat, Morocco, Oct 2017
- E-G. Talbi: Optimization of smart grids, Invited seminar, Jozef Stefan Institute, Ljubljana, Slovenia, Nov 2017

10.1.5. Leadership within the Scientific Community

- L. Jourdan : Co-president of the working group “ATOM: Multi-objective optimization”, GDR RO
- L. Jourdan, A. Liefooghe : Secretary of the association “Artificial Evolution” (EA)
- L. Jourdan: nominated member of CNU 27
- C. Dhaenens: member of the scientific council of GDR RO (Operations research)
- C. Dhaenens: nominated member at Co-NRS, section 6 (National committee of CNRS)
- N. Melab: scientific leader of Grid'5000 (<https://www.grid5000.fr>) at Lille, since 2004
- N. Melab: Chargé de Mission of High Performance Computing and Simulation at Université Lille 1, since 2010
- E-G. Talbi : Co-president of the working group “META: Metaheuristics - Theory and applications”, GDR RO and GDR MACS
- E-G. Talbi : Co-Chair of the IEEE Task force on Cloud Computing within the IEEE Computational Intelligence Society

10.1.6. Scientific Expertise

- E-G. Talbi: QS respondents (Novosibirsk State University, Russia, 2014-2017)

- E-G. Talbi: Reviewer de projets de recherche, National Science Center, Pologne (2017)
- E-G. Talbi: Dutch NOW council (Innovative Research Incentive Scheme) project, Netherlands, 2017
- E-G. Talbi: Reviewer de dossiers de qualification de Professeurs, University of Portsmouth, UK, 2017
- E-G. Talbi: Expertise projets ERC Consolidator Grant (2017)
- E-G. Talbi: Expertise projets STIC/Math Amérique du Sud – Chili et Argentine (2017)
- E-G. Talbi: Expertise projets COFECUB - Brésil (2017)
- N. Melab: Member of the advisory committee for the IT and management engineer training at Faculté Polytechnique de Mons
- N. Melab: Reviewer for the COFECUB scientific evaluation committee (Comité Français d’Evaluation de la Coopération Universitaire et scientifique avec le Brésil), 2017
- N. Melab: Expert for two government research agencies: CONICYT (Chile) and NCN (Poland), 2017

10.1.7. Research Administration

- C. Dhaenens: Vice-head of CRISTAL laboratory (Centre de Recherche en Informatique, Signal et Automatique de Lille), common to CNRS, University of Lille and Ecole Centrale de Lille, 430 people
- L. Jourdan: member of the Bureau du Département de domaine Informatique pour l’école doctorale SPI, University of Lille
- N. Melab: Member of the steering committee of “Maison de la Simulation” at Université Lille 1
- E-G. Talbi, Coordinator of the International Relationships of Inria Lille Nord Europe

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

- Master: Laetitia Jourdan, Business Intelligence, 30h, M1, University of Lille 1, France
- Master : Laetitia Jourdan, Datamining, 60h , M1, University of Lille 1, France
- Master: Laetitia Jourdan, Datawarehouse, 30h, M1, University of Lille 1, France
- Licence: Laetitia Jourdan, Informatique, 48h, L1 University of Lille 1, France
- Master: Laetitia Jourdan, Responsible of Master MIAGE Formation en Alternance, University of Lille 1, France
- Licence: Laetitia Jourdan, Co-responsible of Licence 1 Computer Science, University of Lille 1, France
- 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: Clarisse Dhaenens, responsible of the 5th year of statistics and computer science department.
- Engineering school: Marie-Eléonore Kessaci, Graphs and Combinatorics, 44 HeqTD, Polytech Lille, University Lille 1, France

- Engineering school: Marie-Eléonore Kessaci, Algorithmics and programming, 51 HeqTD, Polytech Lille, University Lille 1, France
- Engineering school: Marie-Eléonore Kessaci, Databases, 71 HeqTD, Polytech Lille, University Lille 1, France
- Engineering school: Marie-Eléonore Kessaci, Mathematics, 20 HeqTD, Polytech Lille, University Lille 1, France
- Engineering school: Marie-Eléonore Kessaci, responsible of the 3th year of statistics and computer science department
- Master lecture: N. Melab, Supercomputing, 24h, Master 2, University Lille 1, France
- Master lecture: N. Melab, Operations Research, 78h, Master 1, University Lille 1, France
- Master leading: N. Melab, Co-head (with B. Merlet) of the Master 2 of advanced scientific computing, U. Lille 1
- Licence: A. Liefooghe, Algorithmic and Data structure, 36h ETD, L2, Université de Lille 1, France
- Licence: A. Liefooghe, Algorithmic for Operations Research, 36h ETD, L3, Université de Lille 1, France
- Master: A. Liefooghe, Databases, 30h ETD, M1, University Lille 1, France
- Master: A. Liefooghe, Advanced Object-oriented Programming, 53h ETD, M2, University Lille 1, France
- Master: A. Liefooghe, Combinatorial Optimization, 10h ETD, M2, University Lille 1, France
- Master: A. Liefooghe, Multi-criteria Decision Aid and Optimization, 25h ETD, M2, University Lille 1, France
- A. Liefooghe is supervising the Master 2 MIAGE IPI-NT
- 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, Algorithms and Applications, 28h, M1, University Lille 1, 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

10.2.2. Supervision

- PhD in progress: Maxence Vandromme, Datamining et optimisation combinatoire adaptés à la prévention et à l'orientation de patients, starting: 1/06/2014, CIFRE with Alicante co-supervision: Clarisse Dhaenens and Laetitia Jourdan
- PhD in progress: Aymeric Blot, Réagir et s'adapter à son environnement : Concevoir des méthodes autonomes pour l'optimisation combinatoire à plusieurs objectifs, September 2015, co-directed Laetitia Jourdan and Marie-Eléonore Marmion
- PhD in progress : Lucien Mousin, Exploiter la connaissance pour mieux optimiser, October 2015, co-directed Clarisse Dhaenens and Marie-Eléonore Marmion
- PhD in progress: AnneLise Bedenel, Classification supervisée et non supervisée en présence de descripteurs évoluant dans le temps. Application à la comparaison d'assurances en ligne, co-directed Laetitia Jourdan and Christophe Biernacki (Modal Inria Team)

- PhD defense: Sylvain Dufourny, Optimisation de décisions économiques concurrentielles dans un simulateur de gestion d'entreprise, Clarisse Dhaenens - Defended in October 2017
- PhD defense: Jan Gmys, Parallel Branch-and-Bound for solving permutation problems on multi- and many-core clusters, Noureddine Melab and Daniel Tuyttens (UMONS, Belgium), 12/2017
- PhD in progress: Sohrab Faramarzi, Optimization of medical laboratories, 02/2016, El-Ghazali Talbi
- PhD in progress: Z. Garroussi, Demand side management in smart grids: Multi-objective models, El-Ghazali Talbi and Rachid Ellaia (EMI, Morocco)
- PhD in progress: J. Pelamatti, Multi-disciplinary design of aerospace vehicles, Jan 2017, El-Ghazali Talbi
- PhD in progress: Ali Hebbal, Surrogate-assisted multi-objective evolutionary algorithms, Oct 2017, El-Ghazali Talbi and Noureddine Melab.
- PhD defense: A. Q. Nguyen, Cloud broker optimization for energy-aware in multi-clouds system, 01/2017, El-Ghazali Talbi and Pascal Bouvry (Univ. Luxembourg)
- PhD defense: Oumayma Bahri, Fuzzy multi-objective optimization, 05/2017, El-Ghazali Talbi and Nahla Ben-Omar (Univ. Tunis, Tunisia)

10.2.3. Juries

- E-G. Talbi: Phd Thesis: Urrego Agudelo Lilliam, A novel method for the approximation of risk of blackout in operational conditions, Université Paris-Est, Créteil, France, Jan 2017
- E-G. Talbi: Phd Thesis: Jonathan Oesterle, Holistic approach to designing hybrid assembly lines, Université de Technologie de Troyes, France, Apr 2017
- E-G. Talbi: Phd Thesis: Birsen Irem Selamoglu, The plant propagation algorithm for discrete optimization, University of Essex, Colchester, UK, June 2017
- E-G. Talbi: Phd Thesis: Omer Yusuf Adam Mohamed, Resource allocation for improved performance and resource efficiency in cloud computing, University of Sydney, Australia, July 2017
- E-G. Talbi: Phd Thesis: Nhan Quy Nguyen, Electric vehicle charging scheduling optimization, UTT Troyes, France, Sept 2017
- E-G. Talbi: Phd Thesis: Mohamed Afilal, Optimisation de la prévision et de la planification des activités d'un centre d'urgence hospitalier, UTT Troyes, France, Dec 2017
- E-G. Talbi: Phd Thesis: Sara Tfaili, Contribution aux graphes creux pour le problème de tournées sur arcs déterministe et robustes: théorie et algorithmes, Normandie Université, Havre, France, Dec 2017
- N. Melab: PhD thesis: Escobar Fernando, Vers une nouvelle génération d'outils d'aide à la décision s'appliquant à la prévention des risques lors de la prescription des antibiotiques : Combinaison des technologies Web sémantique et de l'aide multicritère à la décision, University of Mons, October 13th, 2017
- N. Melab: PhD thesis, GPU-based backtracking strategies for solving permutation combinatorial problems, Federal University of Cerea, Brazil, December 5th, 2017
- C. Dhaenens: PhD Thesis: Nawal Benabbou, Procédures de décision par élicitation incrémentale de préférences en optimisation multicritère, multi-agents et dans l'incertain, Université Paris 6, May 2017
- L. Jourdan: PhD Thesis: Pauline Wauquiez, Task driven representation learning, Université de Lille - May 29th 2017 (Présidente de Jury)
- L. Jourdan: PhD Thesis: Labib Yousef, Contribution à la résolution des problèmes de placement en trois dimensions, Université Picardie Jules Verne, June 29th 2017

- L. Jourdan: HDR: Karine Deschinkel, Nouveaux modèles de programmation linéaire et de flots pour la résolution de problèmes d'optimisation difficiles, Université de Belfort Franche Comté - June 6th 2017

10.3. Popularization

- E-G. Talbi: Organization of a R&D day for all students and lecturers of Polytech'Lille engineering school on “Big data and machine learning” (22/03/2018).

INOCS Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. Member of the Organizing Committees

6th Winter School on Network Optimization, Estoril, Portugal, January 2017: Bernard Fortz.

Meeting of the EURO Working group on Pricing and Revenue Management, Amsterdam, Netherlands, June 2017: Luce Brotcorne.

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

ORBEL 2017, Brussels, Belgium, February 2017: Bernard Fortz.

ROADEF2017 - 18ème Conférence de la Société Française de Recherche Opérationnelle et d'Aide à la Décision, Metz, France, February 2017: Luce Brotcorne, Bernard Fortz, Frédéric Semet.

International Network Optimization Conference (INOC) 2017, Lisbon, Portugal, March 2017: Bernard Fortz.

International Conference on Design of Reliable Communication Networks 2017 (DRCN 2017), Munich, March 2017: Martine Labb  .

Conference of the International Federation of Operational Research Societies, Quebec, Canada, July 2017: Luce Brotcorne, Bernard Fortz.

International Symposium on Locational Decisions (ISOLDE 2017), Toronto, July 2017 Martine Labb  .

INFORMS TSL Conference, Chicago, July 2017: Martine Labb  .

XLIX Brazilian Symposium on Operational Research (XLIX SBPO), Blumenau, Brazil, August 2017: Martine Labb  .

Computer Science Discovery 8 (CSD8), Mons, Belgium, August 2017: Martine Labb  .

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

EURO Journal on Computational Optimization: Martine Labb   - Editor in chief.

Computers and Operations Research: Luce Brotcorne - Associate editor.

INFORMS Journal on Computing: Bernard Fortz - Associate editor.

International Transactions in Operations Research: Bernard Fortz, Martine Labb   - Associate editors.

Transportation Science: Martine Labb   - Member of the Advisory Board.

10.1.3.2. Reviewer - Reviewing Activities

Annals of Operations Research, Applied Computing and Informatics, Central European Journal of Operations Research, Computers & Operations Research, Computational Optimization and Applications, Discrete Applied Mathematics, EURO Journal on Transportation and Logistics, European Journal of Operational Research, IIE Transactions, INFORMS Journal on Computing, International Journal of Management Science and Engineering Management, Mathematical Programming Computation, Networks, Omega, Operations Research, Optimization and Engineering, RAIRO - Operations Research, Transportation Science: Luce Brotcorne, Diego Cattaruzza, Bernard Fortz, Martine Labb  , Maxime Ogier, Fr  d  ric Semet, Markus Sinnl.

10.1.4. Invited Talks

Conference of the International Federation of Operational Research Societies, Quebec, Canada, July 2017: Martine Labbé, EURO plenary lecturer [42].
 Optimization 2017, Lisbon, Portugal, September 2017: Martine Labbé, plenary speaker [43].
 Conférence ROAD 2017, Esatic, Abidjan, March 2017: Luce brotcorne, plenary speaker [37].
 Network Optimization Workshop 2017, Viterbo, June 2017: Luce Brotcorne, Frédéric Semet, invited speaker [38], [61].

10.1.5. Leadership within the Scientific Community

EURO Working Group "Pricing and Revenue Management": Luce Brotcorne - coordinator.
 EURO Working Group "European Network Optimization Group (ENOG)": Bernard Fortz - coordinator.
 EURO Working Group "Vehicle routing and logistics optimization (VEROLOG)": Frédéric Semet - Member of the board.
 SIAG/Optimization Prize committee: Martine Labbé - Chair.
 ORBEL (Belgian Operations Research Society): Bernard Fortz - Member of the board of administration and treasurer.
 ORBEL representative for EURO and IFORS: Bernard Fortz
 CNRS GdR 3002 : Operations Research: Frédéric Semet - Member of the steering committee

10.1.6. Scientific Expertise

Scientific orientation committee of the Interuniversity Centre on Entreprise Networks, Transportation and Logistics (CIRRELT), Canada: Bernard Fortz, Frédéric Semet - Members.
 Scientific Advisory Board of IWR and its Graduate school HGS MathComp, Heidelberg University: Martine Labbé - Member.
 Centro de Matemática, Aplicações Fundamentais e Investigação Operacional, University of Lisbon: Martine Labbé - Member.
 Scientific committee of France-Netherlands Exchange Program: Luce Brotcorne - Member.
 Evaluation committee for Inria/MITACS Exchange Program: Luce Brotcorne - Member.
 Evaluation committee COST GTRI: Luce Brotcorne - Member.
 President of the FRIA PE1 - jury 1: Bernard Fortz - Chair.
 Scientific board of PICOM competitiveness cluster: Frédéric Semet - Member.
 Agence Nationale de la Recherche (ANR): Luce Brotcorne, Frédéric Semet - Reviewer.
 Fond de Recherche Nature et Technologie du Québec: Frédéric Semet - Reviewer.
 Research Council of Norway: Frederic Semet - Reviewer.

10.1.7. Research Administration

Committee for the Technological Development (CDT): Luce Brotcorne - Member.
 CRISTAL: Frédéric Semet - Deputy-director.
 Scientific council of Centrale Lille: Frédéric Semet - Elected member.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Master: Bernard Fortz, Recherche Opérationnelle et Applications, 30hrs, M1, Université de Mons (campus Charleroi), Belgique.

Master: Bernard Fortz, Continuous Optimization, 24hrs, M1 & M2, Université libre de Bruxelles, Belgique.

Master: Martine Labbé, Computer science seminar, 12hrs, M2, Université libre de Bruxelles, Belgique.

Master: Frédéric Semet, Non-linear Optimization, 30hrs, M2, Centrale Lille.

Master: Frédéric Semet, Operations Research, 28hrs, M2, Centrale Lille.

Master: Luce Brotcorne, Optimisation, 14hrs, M1, Polytech Lille.

Master: Luce Brotcorne, Recherche opérationnelle, 16hrs, M1 apprentissage, Polytech Lille.

Master: Luce Brotcorne, Diego Cattaruzza, Maxime Ogier, Frédéric Semet, Numerical Analysis and Optimization, 132hrs, M1, Centrale Lille.

Master: Diego Cattaruzza, Maxime Ogier, Object-Oriented Programming, 48hrs, M1, Centrale Lille.

Master: Diego Cattaruzza, Maxime Ogier, Operations Research, 16hrs, M1, Centrale Lille.

Master: Frédéric Semet, Large-scale optimization methods, 24hrs, M1, Centrale Lille.

Licence: Diego Cattaruzza, Maxime Ogier, Object-Oriented Programming, 36hrs, L3, Centrale Lille.

Licence: Frédéric Semet, Advanced programming and Complexity, 24hrs, L3, Centrale Lille.

Licence: Diego Cattaruzza, Maxime Ogier, Object-Oriented Programming, 40hrs, L2, Centrale Lille.

Licence: Diego Cattaruzza, Web Technologies and Multimedia, 32hrs, L2, Centrale Lille.

Licence: Bernard Fortz, Algorithmique 1, 12hrs, L1, Université libre de Bruxelles, Belgique.

Licence: Bernard Fortz, Algorithmique 2, 24hrs, L1, Université libre de Bruxelles, Belgique.

Licence: Martine Labbé, Projets d'informatique 3 transdisciplinaire, 12hrs, L3, Université libre de Bruxelles, Belgique.

10.2.2. Supervision

PhD: Carlos Casorrán Amilburu, Models and algorithms for Solving Bimatrix Stackelberg games, Université libre de Bruxelles, October 2017, Martine Labbé [11].

PhD in progress: Jérôme De Boeck, Optimization problems in energy, from October 2015, Bernard Fortz.

PhD in progress: Burak Celik, Models and methods for Stackelberg games using bilevel optimization and mixed integer linear programming, from Nov 2016, Luce Brotcorne, Martine Labbé.

PhD in progress: Yaheng Cui, Models and methods for decentralized decision in logistics networks, from Oct 2016, Luce Brotcorne, Eric Ballot.

PhD in progress: Concepción Domínguez Sánchez, Mixed Integer Linear Models and Algorithms for Pricing Problems, from October 2017, Martine Labbé.

PhD in progress: Wenjuan Gu, Location routing for short and local fresh food supply chain, from Oct 2016, Maxime Ogier, Frédéric Semet.

PhD in progress: Léonard Von Niederhäusern, Design and pricing of new services in energy in a competitive environment, from Oct 2015, Luce Brotcorne, Didier Aussel.

PhD in progress: Fränk Plein, Models and methods for the robust verification of booked capacities in gas networks in a decentralized setting, from October 2017, Martine Labbé.

PhD in progress: Luciano Porretta, Models and methods for the study of genetic associations, from May 2011, Bernard Fortz.

PhD in progress: Fabio Sciamannini, Column generation approaches for solving variants of node coloring problems, from October 2014, Bernard Fortz, Martine Labbé.

PhD in progress: Yuan Yuan, Vehicle Routing Problems with Synchronization for City Logistics, from Oct 2016, Diego Cattaruzza, Frédéric Semet.

10.2.3. Juries

PhD: "Quelques Algorithmes de Planification Ferroviaire sur Voie Unique", Laurent Daudet, Université de Paris Est. Frédéric Meunier. Luce Brotcorne - Reviewer.

PhD: "Formulations and algorithms for general and security Sackelberg games", Carlos Casorrán Amilburu, Université libre de Bruxelles. Martine Labbé et Fernando Ordóñez. Bernard Fortz - Examiner and Committee Secretary.

PhD: "The multi-terminal vertex separator problem: Complexity, Polyhedra and Algorithms", Youcef Magnouche, Université Paris Dauphine. Rihda Mahjoub. Frederic Semet - Committee Chair.

PhD: "Vehicle routing problems with road-network information", Ramza Ben Ticha, Université Clermont-Auvergne. Nabil Absi and Alain Quillot. Frédéric Semet - Reviewer and Committee Chair.

PhD: "Problèmes de tournées avec gestion de stock et prise en compte explicite de la consommation d'énergie", Yun He, Université Fédérale de Toulouse-Midi Pyrénées. Cyril Briant and Nicolas Jozefowicz. Frédéric Semet - Reviewer.

PhD: "Conception et optimisation d'un réseau de transport multimodal pour desservir des ports maritimes et leur hinterland", Yulong Zhao, Université de Nantes. N. Bostel and Pierre Dejax. Frédéric Semet - Examiner.

PhD: "Heterogeneous cluster computing for many-task exact optimization - Application to permutation problems", Jan Gmys, Université de Mons. Nouredine Melab and Daniel Tuyttens. Frederic Semet - Committee Secretary.

PhD: "Mathematical optimization for the visualization of complex datasets", Vanesa Guerrero Lozano, Universidad de Sevilla. Emilio Carrizosa Priego and Dolores Romero Morales. Martine Labbé - Examiner.

PhD: "Automatic algorithm configuration", Leslie Angélica Pérez Cáceres, Université Libre de Bruxelles. Thomas Stuetzle. Martine Labbé - Examiner.

Habilitation: "Reformulations and decompositions of mixed integer linear and nonlinear programs", Fabio Furini, Université Paris-Dauphine. Ridha Mahjoub. Martine Labbé- Reviewer.

10.3. Popularization

L. Brotcorne, Club Logistique et Transport, Lille, September 2017.

MEPHYSTO Project-Team

6. Dissemination

6.1. Promoting Scientific Activities

6.1.1. Scientific Events Organisation

6.1.1.1. Member of the Organizing Committees

M. Simon was a member of the Organizing Committee for the *Journée de la Fédération de Recherche Mathématique du Nord Pas de Calais 2017* (place: Villeneuve d'Ascq, duration: one day).

M. Simon was a member of the Organizing Committee for the *Semaine d'Études Maths-Entreprises Hauts de France 2018* (place: Villeneuve d'Ascq, duration: one week). For that aim, she got a subvention by Inria.

6.1.2. Journal

6.1.2.1. Member of the Editorial Boards

Antoine Gloria is editor at NWJM.

6.1.2.2. Reviewer - Reviewing Activities

G. Dujardin is reviewer for M2AN.

6.1.3. Invited Talks

M. Simon was an invited speaker at:

- *Collège de France*, for the physics seminar (January 2017).
- the congress *Stochastic Analysis and its Applications*, taking place in Bedlewo Center (Poland) in june 2017.

6.2. Teaching - Supervision - Juries

6.2.1. Supervision

PhD: M. Duerinckx, PhD at Université Libre de Bruxelles, defended on 19th December 2017 (A. Gloria).

PhD in progress: P. Mennuni, PhD at Université de Lille 1 (S. De Bièvre and G. Dujardin).

6.3. Popularization

M. Simon participated in the diffusion program *MathenJeans*, in Lille. She followed a group of 4 children (aged 10–11), who presented a project to the national competition named *CGénial*.

MODAL Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

Sophie Dabo-Niang has organized a session "Spatial econometrics" of the conference" at the *1st International Conference on Econometrics and Statistics*, June 15-16, 2017, Hong-Kong, China.

Sophie Dabo-Niang co-organises a session "Regression models under non i.i.d. settings" of the 10th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2017)

(<http://www.cmstatistics.org/CMStatistics2017/>), December 16-18, 2017, London.

Vincent Vandewalle organizes a session "Model-based clustering" of the conference" at the 10th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2017)"

(<http://www.cmstatistics.org/CMStatistics2017/>), December 16-18, 2017, London.

10.1.1.1. General Chair, Scientific Chair

Benjamin Guedj, Pascal Germain (both at Modal) and Francis Bach (SIERRA, Inria Paris) co-organize a NIPS 2017 workshop, called "(Almost) 50 shades of Bayesian learning: PAC-Bayesian trends and insights". A large audience is expected, and the workshop has a series of prestigious international speakers. See the [website](#).

Benjamin Guedj is the organizer of the [Modal team scientific seminar](#).

10.1.1.2. Member of the Organizing Committees

Alain Celisse was the co-head of the organizing committee of the *Journée Statistique Mathématique*, January the 8th 2017 at IHP.

Guillemette Marot was the co-head of the organizing committee of JOBIM 2017 (<https://project.inria.fr/jobim2017/fr/>).

Sophie Dabo-Niang was:

Member of the scientific committee of "LICMA'17", May 16-19, 2017, Beyrouth, Lebanon (<http://www.licma.net/>)

Member of the international organizing committee of AMU Commission on Women in Mathematics in Africa-African Women Mathematicians Association 2017 AMUCWMA - AWMA Workshop, July 7-8, 2017, Rabat, Morocco (<http://fsr.um5.ac.ma/PACOM2017/WPACOM2017.php>)

Vincent Vandewalle is member of the scientific animation cell of the bilille platform which has organized two thematic days in 2017:

Omics-driven genome annotation, Lille, March 31st 2017 (https://wikis.univ-lille1.fr/bilille/omics_annotation_2017)

Working with networks and pathways in molecular biology, Lille, November 20th 2017 (https://wikis.univ-lille1.fr/bilille/networks_2017)

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

Sophie Dabo-Niang was member of the local committee program of ISI (61st World Statistics Congress), 16-21, July, 2017, Marrakech, Morocco (<http://payment.isi2017.org/committees/local-programme-committee-lpc/>).

Vincent Vandewalle was member of the committee program of JOBIM 2017 (<https://project.inria.fr/jobim2017/fr/>).

10.1.2.2. Reviewer

Benjamin Guedj is a reviewer for NIPS 2017, AISTATS 2018, ALT 2018 and ICLR 2018, ICML 2018.

Pascal Germain: 6th International Conference on Learning Representations (ICLR 2018).

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

Sophie Dabo-Niang is member of *Revista Colombiana de Estadística*, 2015- –.

Christophe Biernacki is an Associate Editor of the North-Western European Journal of Mathematics (NWEJM).

10.1.3.2. Reviewer - Reviewing Activities

Benjamin Guedj acted as a reviewer for the following journal papers: Math Reviews, and the Annals of the Institute of Statistical Mathematics, Electronic Journal of Statistics.

Sophie Dabo acted as a reviewer for the following journal papers: Statistical Inference for Stochastic Processes, Computational Statistics and Data Analysis, Statistics, ESAIM: Probability and Statistics, Journal of Multivariate Analysis, Journal of Nonparametric statistics, Statistics and Probability Letters, Electronic journal of statistics, Metrika, Annals of Applied Statistics, Statistical Methods and Applications, ...

Christophe Biernacki acted as a reviewer for the following journal papers: Statistics and Computing (STCO), Psychometrika (PMET), Test, Knowledge and Information Systems (KAIS), Journal of Machine Learning Research (JMLR), Journal of Statistical Software (JSS), Neurocomputing (NEUCOM), Computational Statistics and Data Analysis (CSDA).

Alain Celisse acted as a reviewer for the following journal papers: Annals of Statistics, Bernoulli, JMLR.

Serge Iovleff acted as a reviewer for the following journal papers: Statistics and Computing and Neural Processing Letters.

Vincent Vandewalle acted as a reviewer for the following journal papers: Statistics in Medicine, Expert Systems With Applications, Computational Statistics, Journal de la SFdS.

10.1.4. Invited Talks

Sophie Dabo:

LICMA'17, Lebanese International Conference on Mathematics and Applications, Beyrouth, 16-19 May 2017. Nonparametric regression models for spatial data.

JEF 2017 4th Days of Econometrics for Finance, Rabat, 15-16 July, 2017.

<https://sites.google.com/site/jefconference/home>. Functional autoregressive spatial models.

Pan African Congress of Mathematicians 2017, Rabat, 3-7 July, 2017.

<http://fsr.um5.ac.ma/PACOM2017/>. Spatial prediction over spatio-functional data.

SIS 2017 Statistics and Data Science: New Challenges, New generations, Florence, 28-30 June 2017, http://www.fupress.com/archivio/pdf/3407_11724.pdf. Quasi-Maximum Likelihood Estimators For Functional Spatial Autoregressive Models.

Christophe Biernacki gave several invited talks in 2017:

61st World Statistics Congress, Marrakech (Morocco), 16-21 July 2017, <http://payment.isi2017.org/> [30]

Classification Society Conference, Santa Clara (USA), 21-24 June 2017, <https://academicaffairs.ucsc.edu/classification-society-conference/> [27]

XXIVèmes Rencontres de la Société Francophone de Classification, Lyon (France), 28-30 June 2017, <http://polytech-sfc2017.univ-lyon1.fr/> [28]

StatLearn, Lyon (France), 7th April 2017, <http://www.univ-lyon2.fr/culture-savoirs/podcasts/statlearn-2017-727260.kjsp?RH=podcasts>, [20]

Talk to the seminar of the INRA of Jouy-en-Josas, June 12th 2017

Alain Celisse:

New assessment of the cross-validation performance, Montpellier, 24th November, 2017.

Change-point detection with kernels, IHP, 3rd October, 2017.

Cristian Preda:

C. Preda, P. Bastien (2017), Functional models applied to data from image analysis, 61st World Statistics Congress - ISI2017, Marrakech, Morocco, 16-21 July, 2017

A. Amarioarei, C. Preda, Scan statistics for some dependent models and applications, 17th Conference of the ASMDA, London, 6-9 June, 2017.

C. Preda, Gilbert Saporta's contributions to functional data analysis, 17th Conference of the ASMDA, London, UK, 6-9 June, 2017.

A. Amarioarei, C. Preda, Approximation for the scan statistics distribution of a three dimensional Poisson process, IMS China 2017, Nanning, China, June 28 - July 3, 2017.

Vincent Vandewalle gave several invited talks in 2017:

V. Vandewalle, C. Preda, Clustering categorical functional data. Application to medical discharge letters, 20th conference of the society of probability and statistics of Roumania, Brasov (Roumania), April 28, 2017.

V. Vandewalle, C. Biernacki, Dealing with missing data through mixture models, 154th ICB Seminar on "Statistics and clinical practice" Warsaw May 11, 2017.

V. Vandewalle, C. Biernacki, Survival analysis with complex covariates: a model-based clustering preprocessing step, IEEE PHM Dallas June 19th, 2017.

V. Vandewalle, Simultaneous dimension reduction and multi-objective clustering, IFCS Meeting Tokyo August 8th, 2017.

Benjamin Guedj gave several invited talks in 2017:

University College London (3/2017)

Université Paris 5 (3/2017)

Hélioparc (Pau, 3/2017)

Inria SequeL seminar (3/2017)

KU Leuven (5/2017)

Institut de Recherche en Informatique de Toulouse (9/2017)

Inria TAU seminar (10/2017)

Machine Learning in the Real world workshop at Criteo (11/2017).

10.1.5. Leadership within the Scientific Community

Benjamin Guedj is an elected member of the board of the [French Statistical Society](#) (SFdS). He is also deputy general secretary since June 2017.

Benjamin Guedj is a member of the board of **AMIES**, the French Agency fostering collaborations between mathematicians and the private sector.

Guillemette Marot is responsible of bilille, the bioinformatics and bioanalysis platform of Lille. More information about the platform is available at <https://wikis.univ-lille1.fr/bilille/>.

Christophe Biernacki is the president (since 1012) of the data mining and learning group of the French statistical association (SFdS, <http://www.sfds.asso.fr/>).

10.1.6. Scientific Expertise

Sophie Dabo-Niang is expert for the l'Oréal "Women in Science" award since 2014.

Christophe Biernacki acted as a President of a HCERES committee for research evaluation. He was also an elected member to the “Conseil National des Universités” (CNU) from October 2015 to September 2017. From October 2017, he is member of the “Commission d’Evaluation” (CE) of Inria.

Alain Celisse is reviewer for the annual Research Fellowship Competition of Cambridge.

Guillemette Marot reviewed one project as expert for the ANR.

10.1.7. Research Administration

Benjamin Guedj is a member of the scientific Council of the **Laboratoire Paul Painlevé** (Maths Department of the University of Lille).

Benjamin Guedj is an elected member of **Inria’s Evaluation Committee** (CE).

Sophie Dabo is the head of the MeQAME research team of Laboratory LEM-CNRS 9221.

Christophe Biernacki is “Délégué Scientifique” of the Inria Lille center from June 2017.

Guillemette Marot was member of the Research Commission of the University of Lille 2 until December 2017.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Benjamin Guedj is teaching

Master: Machine learning, Theory and Algorithms, 10h, Université du Maine, Le Mans, France

Master: Machine learning, Theory and Algorithms, 30h, ISUP, Paris, France

Master: Machine learning, Theory and Algorithms, 20h, Université Pierre et Marie Curie, Paris, France

Guillemette Marot is teaching:

Licence: Biostatistics, 9h, L1, U. Lille Droit et Santé, France

Licence: Health care Informatics, 6h, L1, U. Lille Droit et Santé, France

Master: Biostatistics, 45h, M1, U. Lille Droit et Santé, France

Master: Supervised classification, 22h, M1, Polytech Lille, France

Master: Statistics for Human Genetics, 1h, U. Lille Droit et Santé, France

Doctorat: Data analysis with R, 14h, U. Lille Droit et Santé, France

Doctorat: Data analysis with R, 7h, COMUE Lille Nord de France, France

Doctorat: RNA-Seq analysis, 6h, U. Lille Droit et Santé, France

Sophie Dabo is teaching:

Licence: Probability, 24h, U. Lille 3, France

Master: Advanced Statistics, 24h, U. Lille 3, France

Master: Biostatistics Statistics, 40h, U. Lille 1, France

Master: Non-parametric Statistics, 24h, UGB, Senegal

Master: Sophie Dabo: Spatial Statistics, 24h, U. Lille 3, France

Christophe Biernacki is head of the M2 “Ingénierie Statistique et Numérique” (<http://mathematiques.univ-lille1.fr/Formations/>) at University Lille 1. He has also the following teaching activities at the same University:

Master: Coaching project, 10h, M1

Master: Data analysis, 97.5h, M2

Master: Coaching internship, 20h, M2

From September 2017, he is on secondment at Inria, without any teaching duty.

Cristian Preda is teaching:

L1: Probability, 40h, Polytech Lille

L1: Inferential Statistics, 50h, Polytech Lille

M1: Data Analysis, 40h, Polytech Lille

M2: Biostatistics, 12h, Polytech Lille

M2: Functional data analysis, 12h, U. Lille 1

Serge Iovleff is teaching:

DUT-S1: Mathématiques discrètes, TD, 68h

DUT-S1: Algèbre linéaire, TD, 32h

DUT-S2: Analyse et méthodes numériques, TD/TP, 56h

DUT-S3: Modélisation Mathématiques, TD, 24h

DUT-S4: R.O. et aide à la décision, TD, 32h

Master Mathématiques Appliquées, Statistique - Ingénierie Mathématique: Object Oriented programming, CTD, M1, U. Lille 1, 20h

Master Mathématiques Fondamentales: Statistics, CTD, M2, U. Lille 1, 24h

Vincent Vandewalle was in CRCT last year without any teaching.

10.2.2. Supervision

PhD: Jérémie Kellner, Gaussian processes and reproducing kernels, Université Lille 1, 11/12/2016, supervision: C. Biernacki, A. Celisse.

PhD: Emad Drwesh, Spatial Statistics in Discrete-Choice Models, University Lille 3, december, 11th, 2017, supervision: Sophie Dabo-Niang, Jérôme Foncel.

PhD: Mohamed Salem Ahmed, Contribution to spatial statistics and functional data analysis, University Lille 3, december, 12th, 2017, Sophie Dabo-Niang, Mohamed Attouch.

PhD in progress: Zied Gharbi (Contribution to Spatial autoregressive models), 2014, supervision: Sophie Dabo-Niang, Laurence Broze.

PhD in progress: Dang Khoi Pham (Planning and re-planning of nurses in an oncology department using a multi-objective and interdisciplinary approach), 2016, supervision: Alejandra Duenas, Christine Di Martinelli, Sophie Dabo-Niang. item PhD in progress: H. Sarter, Outils statistiques pour la sélection de variables et l'intégration de données "cliniques" et "omiques" : développement et application au registre EPIMAD, December 1st, 2016, supervision: C. Gower, G. Marot.

PhD in progress: Le Li, "PAC-Bayesian Online Clustering: theory and algorithms", iAdvize & Université d'Angers, since 11/2014, Benjamin Guedj, Sébastien Loustau.

PhD in progress: Arthur Leroy, "Machine learning algorithms to improve athletes' performance", INSEP, since 10/2017, supervision: Benjamin Guedj, Servane Gey, Jean-François Toussaint.

PhD in progress: Maxime Brunin, Etude du compromis entre précision statistique et temps de calcul, 1/10/2014, supervision: C. Biernacki, A. Celisse.

PhD in progress: Yaroslav Averyanov, New early stopping times and reproducing kernels, 1/10/2017, supervision: C. Preda, A. Celisse.

PhD in progress: Anne-Lise Bedenel, June 2015, supervision: Christophe Biernacki, Laetitia Jourdan.

PhD in progress: Adrien Ehrhardt, June 2016, supervision: Christophe Biernacki, Philippe Heinrich and Vincent Vandewalle.

PhD in progress: Margot Selosse, October 2017, Christophe Biernacki and Julien Jacques.

Serge Iovleff supervises dYawo Mamoua Kobara's Master thesis "*Estimation of a hierarchical Bayesian model for penalized regression*" at African Institute for Mathematical Sciences (AIMS), Senegal, 2017.

10.2.3. Juries

Guillemette Marot was examiner at the PhD defense of M. Canouil, Univ. Lille, September 29, 2017.

Sophie Dabo-Niang was member of the jury of the thesis of Hiba Alawieh, University of Lille 1, March 13th, 2017.

Sophie Dabo-Niang was referee and member of the thesis jury of Rim Ben Elouafi, INSA Rennes, September 5th, 2017.

Sophie Dabo-Niang was president of the thesis jury of Alban Mbinan Mbina, University of FranceVille (Gabon) and University of Lille 1, October 28th, Gabon (FranceVille).

Christophe Biernacki participated as a reviewer to 4 PhD theses and as an examinator to 1 PhD thesis. He was president of a recruitment committee for an assistant professor position.

10.3. Popularization

Pascal Germain gave a short talk vulgarizing a research topic for first year university students. Part of the presentation of the Painlevé Mathematic Laboratory (University of Lille), December, 1st 2017.

Christophe Biernacki has given about 10 talks during 2017 for institutions (Inria, universities...), companies and other related events. He organized also a first short meeting in February 2017 in Lille for obtaining a feedback from company and academic users about the MASSICCC platform developed by the Modal and Select teams (<https://massiccc.lille.inria.fr/#/>).

Alain Celisse gave a talk at the Meetup in Pau in January, 23rd 2017: Change-point detection with structured objects.

Benjamin Guedj gave a Meetup talk in Pau (3/2017) on quasi-Bayesian learning and an application to digits recognition.

NON-A Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- W. Perruquetti is the chairman of the IFAC Technical Committee “Social Impact of Automation”, International Federation of Automatic Control, TC 9.2, and a member of the IFAC Technical Committees “Nonlinear Control Systems”, TC 2.3, and “Discrete Event and Hybrid Systems”, TC 1.3.
- A. Quadrat is a member of the IFAC Technical Committee “Linear Control Systems”, International Federation of Automatic Control, TC2.2
- J.-P. Richard is a member of the IFAC Technical Committee “Linear Control Systems”, International Federation of Automatic Control, TC2.2
- G. Zheng is a member of the IFAC Technical Committee “Social Impact of Automation”, International Federation of Automatic Control, TC9.2
- G. Zheng is co-chair of the working group “Commande et pilotage en environnement incertain” of GRAISYHM

10.1.1.2. Member of the Organizing Committees

A. Quadrat is a member of the organization committee of the Journées Nationales de Calcul Formel (JNCF), Luminy, France, 22–26/01/2018.

J.-P. Richard is associate editor of the conferences EUCA-IEEE ECC 2018, Limassol, Cyprus (16th European Control Conference), 12–15/06/2018, IFAC TDS 2018, Budapest, Hungary (14th IFAC Workshop on Time Delay Systems), 28–30/06/2018, and IEEE MED 2017, Valletta, Malta (25th IEEE Mediterranean Conference on Control and Automation), 3–6/06/2017.

10.1.2. Scientific Events Selection

J.-P. Richard was the coordinator of the Inria Evaluation Seminar of the theme “Optimization and control of dynamical systems” à Rungis, 13–17/03/2017.

10.1.2.1. Member of the Conference Program Committees

A. Quadrat was a member of the Program Committee of the 10th International Workshop on Multidimensional (nD) Systems (nDS 2017), University of Zielona Góra, Poland, 13-15/09/2017.

J.-P. Richard was a member of the Program Committee of the conference IARA VEHICULAR 2017, Nice, France (6th Int. Conf. on Advances in Vehicular Systems, Technol. & Appl.), 23-27/06/2017. He will also be a member of the Program Committee of IARA VEHICULAR 2018, Venice, Italy (7th Int. Conf. on Advances in Vehicular Systems, Technol. & Appl.), 24-28/06/2018.

10.1.2.2. Reviewer

The members of NON-A team are reviewers and contributors of all top-ranked conferences in the field of automatic control (IEEE Conference on Decision and Control, IFAC World Congress, European Control Conference, American Control Conference, etc.).

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

D. Efimov is associate editor of:

- Associate editor, IFAC Journal on Nonlinear Analysis: Hybrid Systems
- Associate editor, Asian Journal of Control

He was also guest editor of two special issues on differentiators and on interval and set-membership estimation for International Journal of Control.

A. Polyakov is associate editor of:

- International Journal of Robust and Nonlinear Control
- Journal of Optimization Theory and Applications
- Automation and Remote Control

A. Quadrat is associate editor of Multidimensional Systems and Signal Processing.

10.1.3.2. Reviewer - Reviewing Activities

The members of NON-A team are reviewers and contributors of all top-ranked conferences in the field of automatic control (IEEE Conference on Decision and Control, IFAC World Congress, European Control Conference, American Control Conference, etc.).

10.1.4. Invited Talks

A. Quadrat was invited to give a talk at the conference “Questions algorithmiques en algèbre, analyse, géométrie et topologie”, I.H.E.T, Tunis, Tunisia, 24–26/10/2017, and at the “1st DECOD Workshop – Delays and Constraints on Distributed Parameter Systems”, CentraleSupélec, Gif-sur-Yvette, France, 22–24/11/2017.

10.1.5. Leadership within the Scientific Community

The NON-A team is the leader in the field of non-asymptotic control and estimation using homogeneity framework.

Moreover, the NON-A team is also leader in algebraic systems theory. In particular, two invited sessions “Algebraic Methods and Symbolic-Numeric Computation in Systems Theory” and “New Results in Multidimensional Systems Theory” were organized at the IFAC 2017 World Congress, Toulouse (France), 09–14/07/2017. Finally, the book “Algebraic and Symbolic Computation Methods in Dynamical Systems” was edited by A. Quadrat and E. Zerz (RWTH Aachen, Germany) for the collection “Advances in Delays and Dynamics” (ADD), volume 9, Springer, and will appear in 2018.

10.1.6. Scientific Expertise

Since 2016, R. Ushirobira and D. Efimov have been working with the start-up Neotrope (Tourcoing). Following a first contract (2016) on the treatment of electro-dermal signals from their connected bracelet, a second part of the collaboration is underway for the filtering of the heart rate signal (HR). A second contract should be implemented in the coming months.

10.1.7. Research Administration

- W. Perruquetti is Vice-deputy of INS2I CNRS.
- J.-P. Richard is an Expert for the French Ministry of Research, MENESR/MEIRIES.
- A. Quadrat is a member of the “Bureau du Comité des Equipes-Projets” (BCEP) and of the “Commission des Emplois de Recherche”, Inria Lille.
- R. Ushirobira continues to participate in our local commissions: technological development (CDT, since January 2012); IT users (CUMI, since March 2016); sustainable development (CLDD since September 2016). Since 2013, she has been leading the “30 minutes of science” cycle (monthly seminar for the center’s scientific staff).

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

From September 2016 to June 2017, Y. Bouzidi was ATER at Ecole Central de Lille. He completed 192 hours of computer science courses/TD, as well as algorithmic courses, for students in L3 and M1.

Since February 2017, R. Ushirobira has completed 24 hours of Linear Algebra course / TD at Polytech'Lille, 8 h of Automatic TP in L3 at the University of Lille1 and 38 h TD of Mathematics in Mathematics. 1st year at Centrale Lille. She supervises this year students in 4th and 3rd grades of Arthur Rimbaud College Villeneuve d'Ascq, as part of 'Math in Jeans'.

10.2.2. Supervision

PhD: Maxime Feingesicht, "Dynamic Observers for Control of Separated Flows", Ecole Centrale de Lille, 11/12/2017, supervisors: J.-P. Richard, F. Kerherve, A. Polyakov

PhD in progress: Haik Jan Davtjan, "Estimation in complex systems", EC Lille, 2016, UCoCoS EU project, supervisors: D. Efimov, J.-P. Richard

PhD in progress: Nadhynee Martinez Fonseca, "Non-asymptotic control and estimation problems in robotic system designed for manipulation of micro-organisms", National Polytechnic Institute of Mexico, 2015, supervisors: I. Chairez-Oria, A. Polyakov

PhD in progress: Tatiana Kharkovskaya, "Interval Observers for Distributed Parametr Systems", ITMO University-EC Lille, 2015, supervisors: D. Efimov, J.-P. Richard and A. Kremlev

PhD in progress: Langueh Désiré Kokou, "Inversion à gauche, singularités d'inversion, immersion et formes normales pour les systèmes dynamiques", 2015, supervisors: Thierry Floquet, Gang Zheng

PhD in progress: Gabriele Perozzi, "Save exploration of aerodynamic field by microdrone", Onera-Region, 2015, supervisors: D. Efimov, J.-M. Biannic and L. Planckaert

PhD in progress: Francisco Lopez-Ramirez, "Control and estimation via implicit homogeneous Lyapunov function", Inria, 2015, supervisors: D. Efimov, W. Perruquetti and A. Polyakov

PhD in progress: Guillaume Rance, "Asservissement paramétrique de systèmes flexibles à retard et application aux viseurs", CIFRE Safran Electronics & Defense, 2014, supervisors: A. Quadrat, A. Quadrat, H. Mounier

PhD in progress: Haik-Jan Silm, "Estimation in complex systems", 2016, supervisors: D. Efimov, R. Ushirobira, W. Michels, J.-P. Richard

PhD in progress: Yue Wang, "Development of a blimp robot for indoor operation", 2016, supervisors: Wilfrid Perruquetti, Denis Efimov, Gang Zheng

PhD in progress: Siyuan Wang, "Robust control of quadrotors", 2017, supervisors: Andrey Polyakov, Gang Zheng

10.2.3. Juries

- A. Quadrat was member of a selection committee for a MCF position (CNU 15-17), University of Limoges.
- R. Ushirobira was a jury member of the CR2 Inria 2017 competition for the Lille - Nord Europe center. She was also invited to participate in 3 selection committees for MCF positions (CNU 61, ENSEA and CNAM in May, Ecole Centrale de Nantes in September).

RAPSODI Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. General Chair, Scientific Chair

Claire Chainais-Hillairet was general chair of the organisation committee of FVCA8 held in Lille on June 12-16, 2017. Clément Cancès was general chair for the Journée de la Fédération de Recherche Mathématique du Nord-Pas-de-Calais on October, 4. He also organized the closing day of the ANR Geopor on Nov. 7, 2017.

Emmanuel Creusé is a member of the organizing committee of the Study Week Mathematics-Enterprises, which will take place in Lille from January 2018, 29 to February 2018, 02. (see <https://indico.math.cnrs.fr/event/2413/>).

Thomas Rey was a main organizer of the Microturbu workshop held in Lille on Oct. 19–20, 2017.

9.1.1.2. Member of the Organizing Committees

The whole team RAPSODI was involved in the organization of the FVCA8 conference.

9.1.2. Scientific Events Selection

9.1.2.1. Chair of Conference Program Committees

Clément Cancès edited the proceedings of FVCA8 together with Pascal Omnes (CEA Saclay & Univ. Paris Nord).

9.1.2.2. Reviewer

Several member of the team RAPSODI were deeply involved in the reviewing process for the FVCA8 proceedings.

9.1.3. Journal

9.1.3.1. Member of the Editorial Boards

C. Chainais-Hillairet is a member of the editorial board of the North-Western European Journal of Mathematics (<http://math.univ-lille1.fr/nwejm/>) and of the International Journal on Finite Volumes (<http://www.i2m.univ-amu.fr/IJFV/>).

9.1.3.2. Reviewer - Reviewing Activities

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

9.1.4. Invited Talks

- C. Cancès was an invited speaker at the MAMERN'11 conference organized at Oujda (Morocco) on May 17-20, 2017: <http://mamern11.ump.ma/>. He was invited to give talks in several workshops (Oberwolfach $\times 2$, workshop on Finite Volumes in Nice, minisymposium on porous media flows in ENUMATH). He was also invited to give several seminars in France (Inria Paris-LJLL, ENS Rennes, IFPEN Rueil-Malmaison) or abroad (Bonn).
- C. Chainais-Hillairet was an invited plenary speaker at the SMAI Conference held in Ronce les Bains in June 2017. She gave talks in workshops: workshop on Finite Volumes in Nice and Journées multiphasiques et incertitudes in Nantes in October 2017. She was invited to give lectures in two CIMPA Summer Schools: 10 hours lectures in Ifrane (Summer school on numerical analysis and partial differential equations, May 2017) and 8 hours lectures in Kanpur (Summer school on multiscale computational methods and error control, July 2017).

- E. Creusé was invited to give a seminar at LAMFA in Amiens. He also gave talks in International conferences (NUMELEC, Paris and ACOMEN, Ghent) and workshops (GATIPOR, Paris).
- I. Lacroix-Violet was invited to give a seminar at LAMFA in Amiens.
- T. Rey was invited to give plenary talks in several workshops: Mafran Days in Cambridge, Computational Methods in Kinetic Theory and Related Models in Toulouse, and Mathematical Aspects of Fluids: Kinetic and Dynamics at ENS Paris

9.1.5. Scientific Expertise

C. Cancès reported on scientific proposals for the Croatian Science Foundation (HRZZ).

9.1.6. Research Administration

C. Cancès is the head of the MaNu Research Group (GdR MaNu, <http://gdr-manu.math.cnrs.fr/>) funded by the Institute for Mathematical Sciences and Interaction (INSMI) of the French National Center for Research (CNRS).

During the training year 2016-2017, E. Creu   got an Inria partial delegation (50%). He had in charge to develop some actions promoted by AMIES (Agency for Mathematics in Interaction with Business and Society). More particularly, his action was devoted to several characteristic points:

Management of some PEPS (First support for exploratory projects). Discussions to initiate collaborations between academic researchers in Mathematics and industrial partners,

Talks and meeting animations to promote mathematical studies to high school pupils and their teachers, as well as to bachelor students (in Lens, Lille, Douai).

Presentation of AMIES to the Mathematical Laboratories of the region Hauts-de-France (Lille, Calais, Lens, Amiens, Valenciennes).

Creation of CIME, a node of the network "MSO" (Modelisation - Simulation - Optimisation) developped by AMIES (<http://cime.math.cnrs.fr/>). CIME is a structure which allows enterprises to find easier mathematician collaborators in the Hauts-de-France, either in the mathematical teams of Inria Lille Nord Europe, or in the mathematical laboratories of the region.

Participation to some national events (RUE (Paris, March 2017) - TERATEC (Palaiseau, June 2017), FEM (Paris, December 2017)).

Participation to the monthly AMIES meeting.

Organisation of the Mathematical Study Week in Mathematics, which will take place in Lille in January 2018.

C. Chainais-Hillairet is head of the Commission Emplois de Recherche of the Lille - Nord Europe Inria research center.

C. Calgaro is a member of the Commission de la Formation et de la Vie Universitaire of the Academic Council of Universit   Lille 1.

I. Lacroix-Violet, B. Merlet and Thomas Rey are members of the Conseil du Laboratoire Paul Painlev  .

C. Canc  s and B. Merlet are members of the commission des th  ses of the Ecole doctorale.

I. Lacroix-Violet was organizing the weekly seminar of the ANEDP team of the Paul Painlev   laboratory until last July. She was substituted by T. Rey in September 2017.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

The group is strongly involved in teaching at the Universit   Lille 1. C. Calgaro is in charge respectively of the Master of Mathematical Engineering. C. Chainais-Hillairet was in charge of the Master 2 of Scientific Computing until July 2017. She was substituted by B. Merlet for this task. E. Creus   is responsible of the "Cursus Master Ing  nierie" in Mathematics, Lille 1 University. C. Canc  s gave lectures at Polytech' UPMC.

9.2.2. Supervision

HdR: Ingrid Lacroix-Violet defended her habilitation thesis on Nov. 24, 2017. *Comportements asymptotiques, conditions aux limites et analyse numérique pour des modèles fluides*, Univ. Lille 1.

PhD: Ahmed Ait Hammou Oulhaj defended his PhD thesis on Dec. 11, 2017. *Design and analysis of nonlinear numerical schemes for solving parabolic problems: application to porous media flows*, Univ. Lille 1, advisors: C. Cancès & C. Chainais-Hillairet. *Design and analysis of nonlinear numerical schemes for solving parabolic problems: application to porous media flows*, since 01/10/2014, advisors: C. Cancès & C. Chainais-Hillairet.

PhD in progress: Claire Colin, *Analyse numérique et simulations de modèles multifluides*, since 01/10/2015, advisors: C. Calgaro & E. Creusé.

PhD in progress: Luca Ferrari, *Line energies and applications to image reconstruction of partially masked objects*, since 01/09/2015, advisors: A. Chambolle (CNRS & CMAP, École Polytechnique) & B. Merlet.

PhD in progress: Nicolas Peton, *Numerical methods for a stratigraphic model with nonlinear diffusion and moving frontier areas*, 15/10/2015, C. Cancès, Q. H. Tran (IFPEN) & S. Wolf (IFPEN).

PhD in progress: Antoine Zurek, *Numerical and theoretical analysis of models describing the corrosion of materials*, since 01/10/2016, advisors: C. Chainais-Hillairet & B. Merlet.

Master internship: Aymeric Nayet, *Development and parallelization on GPU of a C++ code for the resolution of a 2D×2D kinetic equation with BGK relaxation*, supervisor: T. Rey.

Master internship: Anissa El Keurti, *Study of an upwind finite volume scheme for non-local transport equation*, supervisor: T. Rey.

9.2.3. Juries

C. Cancès reported on Laurent Quaglia's PhD thesis, defended on Dec. 13, 2017 at Aix-Marseille Univ. Title: *Contribution à l'étude des écoulements diphasiques avec capillarité*.

C. Chainais-Hillairet reported on:

- Clémentine Courtès' PhD thesis, defended on Nov. 23, 2017 at Univ. Paris-Sud (Orsay).
Title: *Analyse numérique de systèmes hyperboliques-dispersifs*.
- Laurent Quaglia's PhD thesis, defended on Dec. 13, 2017 at Aix-Marseille Univ. Title: *Contribution à l'étude des écoulements diphasiques avec capillarité*.
- Christophe Le Potier's HdR, defended on Nov. 15, 2017 at Univ. Paris-Est (Marne-la-Vallée). Title: *Construction et développement de nouveaux schémas pour des problèmes elliptiques ou paraboliques*.

E. Creusé reported on:

- Sarah Ali Hassan's PhD thesis, defended on June 26, 2017 at UPMC Paris 6. Title: *Estimations d'erreur a posteriori et critères d'arrêt pour des solveurs par décomposition de domaine et avec des pas de temps locaux*.
- Rita Riedlbeck's PhD thesis, defended on November 27, 2017 at Montpellier University.
Title: *Algorithmes adaptatifs pour la poro-mécanique et la poro-plasticité*.

B. Merlet reported Sylvain Dotti's PhD thesis, defended on Dec. 4, 2017 at Aix-Marseille Univ. Title: *Numerical approximation of hyperbolic stochastic scalar conservation laws*.

C. Calgaro and E. Creusé were members of the PhD's jury of Abdullatif Ellawy, defended on Dec. 14, 2017, at Lille 1 University. Title : *Propriétés qualitatives de quelques systèmes de la mécanique des fluides incompressibles*.

C. Cancès was a member of the jury of the PhD thesis of Van Thanh Nguyen, defended on Oct. 3, 2017 at the University of Limoges. Title: *Problèmes de transport partiel optimal et d'appariement avec contrainte*.

C. Chainais-Hillairet was a member of the following juries:

- PhD's jury of Maxime Herda defended on September 20, 2017 at the University of Lyon
1. Title: *Analyse asymptotique et numérique de quelques modèles pour le transport de particules chargées*.
- PhD's jury of Sarah Leclavier defended on December 12, 2017 at the University of Rouen.
Title: *Volumes finis et solutions renormalisées, application à des systèmes couplés*.
- HdR's jury of Ingrid Lacroix-Violet defended on November 24, 2017 at Lille 1 University.
Title: *Comportements asymptotiques, conditions limites et analyse numérique pour des modèles fluides*.

T. Rey was a member of the PhD's jury of Ward Melis, defended in March 2017 at KU Leuven.
Title: *Projective integration for hyperbolic conservation laws and multiscale kinetic equations*.

C. Calgaro and C. Cancès are members of the Jury de l'Agrégation de Mathématiques, which is a national hiring committee for the highest level of high-school teachers.

9.3. Popularization

C. Calgaro is in charge of the communication of "Laboratoire Paul Painlevé" and she is in charge of the relation between the University of Lille 1 and high schools. Accordingly, she organizes various events which promote mathematics among young peoples like:

Les Mathématiques itinérantes (<http://mathematiques.univ-lille1.fr/Ouvertures/Mathematiques-itinerantes/>)

La semaine des Mathématiques (<http://mathematiques.univ-lille1.fr/Ouvertures/Mathematiques-itinerantes/>)

Stage en sciences pour les élèves de seconde (<http://www.univ-lille1.fr/etudes/stageseconde>)

Members of the team participate regularly in these actions.

SEQUEL Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

- *Visually grounded interaction and language*, workshop at NIPS 2017, organized by Florian Strub, Harm de Vries, Abhishek Das, Satwik Kottur, Stefan Lee, Mateusz Malinowski, Olivier Pietquin, Devi Parikh, Dhruv Batra, Aaron C Courville, Jérémie Mary. URL: <https://nips.cc/Conferences/2017/Schedule?showEvent=8766>
- O. Maillard: Workshop of the working group *Sequential Structured Statistical Learning*, May 17 2017 at Institut des Hautes Etudes Scientifiques (Bures-sur-Yvette). URL: <https://sites.google.com/site/groupedetravailssl>

10.1.1.1. Member of the Conference Program Committees

Members of SEQUEL have been involved in the following program committees in 2017:

- Senior PC for International Joint Conference on Artificial Intelligence (IJCAI 2017)
- Senior PC for ACM KDD 2017
- International Conference on Artificial Intelligence and Statistics (AI & STATS 2017)
- PC member for the international Conference On Learning Theory (COLT 2017)
- European Conference on Machine Learning (ECML 2017)
- 1st Workshop on Transfer in Reinforcement Learning (TiRL) 2017
- The Third International Conference on Machine Learning, Optimization and Big Data (MOD 2017)
- French conferences:
 - Extraction et Gestion de Connaissances (EGC),
 - Journées Francophones de Planification, Décision, Apprentissage (JFPDA)
 - Journées de la Société Francophone de Classification (SFC)
 - Conférence francophone sur l’Apprentissage Automatique (CAp)

10.1.1.2. Reviewer

Édouard Oyallon receives a “best NIPS reviewer award”.

Members of SEQUEL have reviewed papers for the following conferences:

- AI&Stats, COLT, ECML, ICML, IJCAI, NIPS, ALT.

10.1.2. Journal

10.1.2.1. Reviewer - Reviewing Activities

- Automatica
- IEEE Transactions on Pattern Analysis and Machine Intelligence - Journal Reviewer
- IEEE transaction on Software Engineering
- International Federation of Automatic Control
- Bernoulli Journal
- Journal of Machine Learning Research
- IEEE Transaction on Signal Processing

10.1.3. Invited Talks

- R. Gaudel, *Recommendation as a Sequential Process*, Presented on Februaray 1st, 2017, at Séminaire CMLA, Paris, France (*CMLA 2017*)
- R. Gaudel, *Recommendation as a Sequential Process*, Presented on January 10th, 2017, at Séminaire ENSAI, Rennes (Bruz), France (*ENSAI 2017*)
- A. Lazaric, *Spectral Methods for Reinforcement Learning*, Presented on April 10, 2017, at Amazon, Berlin, Germany
- M. Valko, *SequeL, graphs in ML, and online recommender systems*, Presented on November 9th, 2017 at Plateau Inria Euratechnologies in Lille, France (*Euratechnologies 2017*)
- M. Valko, *Sequential sampling for kernel matrix approximation and online learning* Presented on September 19th, DeepMind, London, UK (*DeepMind 2017*)
- M. Valko, *Active learning on networks and online influence maximization*, Presented on September 18th, 2017, Decision Theory and Network Science: Methods and Applications, Lancaster, UK (*STOR-i 2017*)
- M. Valko, *Side observation in graph bandits*, Presented on July 11th, 2017, ICML 2017 workshop on Picky Learners, Sydney, Australia (*ICML 2017*)
- M. Valko, *Distributed sequential sampling for kernel matrix approximation*, Presented on June 28th, 2017, L’Institut de Mathématiques de Toulouse, France (*IMT 2017*)
- M. Valko, *Online sequential solutions for recommender systems*, Presented on June 14th, 2017 at Journées Scientifiques Inria 2017 in Nice, France (*JS 2017*)
- M. Valko, *Where is Justin Bieber?*, Presented on March 30th, 2017 at Dating day in Lille, France (*Dating 2017*)
- M. Valko, *Distributed sequential sampling for kernel matrix approximation*, Presented on March 22nd, 2017, for Universität Potsdam at Amazon (*Berlin 2017*)

10.1.4. Scientific Expertise

- É. Kaufmann was a member of the committee of Experts for Hiring junior faculty in the maths departement of Université of Lille 1
- J.Mary was a member of the industrial transfer commission of Inria Lille
- Alessandro Lazaric was reviewer for NSFC-ISF Research Grant
- Philippe Preux is a member of the evaluation committee and participates in the hiring, promotion, and evaluation juries of Inria:
 - Inria CR1 hiring committee
 - Inria Lille CR2 hiring committee
 - Inria committee for researcher promotion
 - Inria committee for PEDR
- Philippe Preux was a member of the hiring committees for 1 professor and 2 associate professors at the Université de Lille 3
- Philippe Preux was a member of the committee for PhD grant of the “Pôle Métropolitain de la Côte d’Opale”
- Philippe Preux reviewed a proposal for ANRT (and declined invitation from ANR)
- M. Valko is an elected member of the evaluation committee and participates in the hiring, promotion, and evaluation juries of Inria, notably
 - Hiring committee for junior researchers at Inria Saclay (2017)
 - Inria work group for deontological ethics (2017)
 - Selection committee for Inria award for scientific excellence of junior and confirmed researchers (2017)

- M. Valko was a member national Inria acceptance committee for hiring junior researchers
- M. Valko was a member of the committee of Experts for Hiring junior faculty at CMLA, ENS Paris-Saclay

10.1.5. Research Administration

- *M. Gaudel* was member of the Board of CRISTAL.
- Philippe Preux is:
 - “délégué scientifique adjoint” of the Inria center in Lille
 - member of the Inria evaluation committee (CE)
 - member of the Inria internal scientific committee (COSI)
 - member of the scientific committee of CRISTAL
 - the head of the “Data Intelligence” thematic group at CRISTAL

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Master: É. Kaufmann, 2017/2018 Fall: Machine Learning, 18h eq TD, M2 Maths/Finances, Université de Lille 1

Master: É. Kaufmann, 2016/2017 Spring: Data Mining, 36h eq TD, M1 Maths/Finances, Université de Lille 1

Master: A. Lazaric, 2017/2018 Fall: Reinforcement Learning, 36h eqTD, M2, ENS Cachan

Master: M. Valko, 2017/2018 Fall: Graphs in Machine Learning, 36h eqTD, M2, ENS Cachan

10.2.2. Supervision

PhD in progress: Marc Abeille, Exploration-exploitation in reinforcement learning, started Sept. 2014, advisor: Remi Munos, Alessandro Lazaric

PhD in progress: Merwan Barlier, Human-in-the loop reinforcement learning for dialogue systems, started Oct. 2014, advisor: Olivier Pietquin

PhD in progress: Alexandre Bérard, Deep learning for post-editing and automatic translation, started Oct. 2014, advisor: Olivier Pietquin

PhD in progress: Lilian Besson, Bandit approach to improve Internet Of Things Communications, started Oct. 2016, advisor: Émilie Kaufmann, Christophe Moy (CentraleSupélec Rennes)

PhD in progress: Daniele Calandriello, Efficient Sequential Learning in Structured and Constrained Environment, Inria, started Oct. 2014, advisor: Michal Valko, Alessandro Lazaric

PhD in progress: Ronan Fruin, Exploration-exploitation in hierarchical reinforcement learning, Inria, started Dec. 2015, advisor: Daniil Ryabko, Alessandro Lazaric

PhD in progress: Pratik Gajane, Multi-armed bandits with unconventional feedback, started Oct. 2014, defended Nov. 14th 2017, advisor: Philippe Preux

PhD in progress: Guillaume Gautier, DPPs in ML, started Oct. 2016, advisor: Michal Valko; Rémi Bardenet

PhD in progress: Jean-Bastien Grill, Création et analyse d’algorithmes efficaces pour la prise de décision dans un environnement inconnu et incertain, Inria/ENS Paris/Lille 1, started Oct. 2014, advisor: Rémi Munos, Michal Valko

PhD in progress: Édouard Leurent, Autonomous vehicle control: application of machine learning to contextualized path planning, started Oct. 2017, advisor: Odalric Maillard, Philippe Preux, Denis Effimov (NON-A), Wilfrid Perruquetti (NON-A)

PhD in progress: Sheikh Waqas Akhtar, Bandits for non-stationarity and structure, started Oct. 2017, advisor: Odalric Maillard, Daniil Ryabko.

PhD in progress: Julien Perolat, Reinforcement learning: the multi-player case, started Oct. 2014, advisor: Olivier Pietquin

PhD in progress: Pierre Perrault, Online Learning on Streaming Graphs, started Sep. 2017, advisor: Michal Valko; Vianney Perchet

PhD in progress: Mathieu Seurin, Multi-scale rewards in reinforcement learning, started Oct. 2017, advisor: Olivier Pietquin, Philippe Preux

PhD in progress: Julien Seznec, Sequential Learning for Educational Systems, started Mar. 2017, advisor: Michal Valko; Alessandro Lazaric, Jonathan Banon

PhD in progress: Xuedong Shang, Adaptive methods for optimization in stochastic environments, started Oct. 2017, advisor: Émilie Kaufmann, Michal Valko

PhD in progress: Florian Strub, Reinforcement Learning for visually grounded interaction, started Jan. 2016, advisors: Olivier Pietquin and Jeremie Mary

PhD in progress: Kiewan Villatet, Deep Learning for Conversion Rate Prediction in Online Advertising, started Oct. 2017, advisor: Philippe Preux

10.2.3. Juries

PhD and HDR juries:

- É. Kaufmann, *Navikumar Modi*, CentraleSupélec Rennes, May 2017
- A. Lazaric:
 - *Stefano Paladino*, Politecnico di Milano, Dec 2017
 - *Micheal Castronovo*, Université de Liege, March 2017
 - *Raffaello Camoriano*, Università di Genova, April 2017
 - *Claire Vernade*, TelecomParis Tech, October 2017
- Ph. Preux:
 - Cricia Zilda Felicio Paixao, Uniervity Uberlandia, Brasil
 - Thibault Gisselbrecht, LIP 6, UPMC, Paris
 - Pratik Gajane, CRISTAL, Lille
- M. Valko: *Clément Bouettier*, Université Toulouse 3 Paul Sabatier, June 2017

PhD mid-term evaluation:

- M. Valko: *Thibault Liétard*, Université Lille, September 2017

10.3. Popularization

- CNRS publishes an article about zonotope sampling presented at ICML (see <http://www.cnrs.fr/ins2i/spip.php?article2633>).
- Julien Seznec publishes an article in *Les Echos* that discusses ML for education (November 2017).
- Émilie Kaufmann gave a popularization talk about bandit algorithms aimed at high school/prepa students at the MathPark seminar, organized at IHP in Paris (April 2017).
- *Avec GuessWhat?! quand l'humain joue, l'ordinateur s'initie au langage*, <https://www.inria.fr/centre/lille/actualites/avec-guesswhat!-quand-l-humain-joue-l-ordinateur-s-initie-au-langage>
- Florian Strub and Mathieu Seurin demonstrated guesswhat?! during the celebrations of Inria 50th anniversary (November 2017).
- Philippe Preux:

- interviewed for an article on *L'intelligence artificielle, est-ce vraiment de l'intelligence ?* in *BioTech.info*, Jan. 2017.
 - participates to a debate about Artificial Intelligence, as part of the franceIA tour (Euratechnologies, Lille).
 - interview by AFP in relation to alphaGo.
 - interviewed for an article on AI and games, published in *Le figaro*.
 - an interview that led to a publication in ATOS Connexion, the ATOS internal journal.
 - a video has been made with him being interviewed on Artificial Intelligence by NordEka (to be available on youtube).
 - has been selected to be portrayed at the “Soirée partenaires de l'université de Lille”, Nov.
 - was a member of the organization committee of the celebrations of the 50th Inria anniversary in Lille.
 - co-organizes a meet-up on big data and machine learning at Inria.
- M. Valko, *Comment maximiser la détection des influenceurs sur les réseaux sociaux ?, popularization talk, Presented on May 30th, 2017 at 13 France (Inria 13:45 2017)*

BONSAI Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. General Chair, Scientific Chair

- JOBIM 2017, national conference in bioinformatics (J.-S. Varré for the organizing committee, H. Touzet for the program committee).
- SeqBio 2017, national workshop on stringology, combinatorics and bioinformatics (M. Salson).
- From RNA-Seq data to bioinformatics analysis using Nanopore sequencers 2017 (H. Touzet).

9.1.1.2. Member of the Organizing Committees

- JOBIM 2017, national conference on bioinformatics (A. Béliard, S. Janot, P. Marijon, L. Noé, P. Pericard, M. Pupin, T. Rocher, C. Saad, M. Salson).
- SeqBio 2017, national workshop on stringology, combinatorics and bioinformatics (R. Chikhi, S. Janot, L. Noé, H. Touzet).

9.1.2. Scientific Events Selection

9.1.2.1. Member of the Conference Program Committees

- WABI 2017 (M. Salson, H. Touzet).
- BCB 2017 (R. Chikhi).
- HiTSEQ 2017 (R. Chikhi).
- CSR 2017 (H. Touzet).
- JOBIM 2017 (S. Blanquart, R. Chikhi).

9.1.2.2. Reviewer

- IWOC 2017 (M. Salson).
- WALCOM 2017 (M. Giraud, M. Salson),
- LAGOS 2017 (R. Chikhi).
- WG 2017 (R. Chikhi).

9.1.3. Journal

9.1.3.1. Reviewer - Reviewing Activities

- Bioinformatics (M. Salson, R. Chikhi, L. Noé).
- Discrete Applied Mathematics (M. Salson).
- NAR (R. Chikhi).
- BMC Bioinformatics (R. Chikhi, L. Noé).
- PeerJ (L. Noé, M. Giraud).

9.1.4. Research Administration

- Member of the CUB for Inria Lille (S. Blanquart).
- Member of the CDT for Inria Lille (M. Pupin).
- Member of the CUMI for Inria Lille (M. Salson).
- Member of the national scientific committee of INS2I-CNRS (H. Touzet).

- Member of the scientific committee of MBIA – INRA (H. Touzet).
- Head of the national CNRS network GDR Bioinformatique moléculaire (<http://www.gdr-bim.cnrs.fr>, H. Touzet).
- Co-head of the Lille Bioinformatics platform, bilille (H. Touzet).
- Member of the CRISTAL Laboratory council (H. Touzet).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Teaching in computer science:

- License: L. Noé, *Networks*, 42h, L3 Computer science, Univ. Lille 1.
- License: L. Noé, *Programming (Python)*, 54h, L3 Computer science' S3H, Univ. Lille 1.
- License: L. Noé, *Coding and information theory*, 36h, L2 Computer science, Univ. Lille 1.
- License: L. Noé, *Functional Programming*, 30h, L2 Computer science, Univ. Lille 1.
- License: J.-S. Varré, *Object oriented programming*, 36h, L2 Computer Science, Univ. Lille 1.
- License: J.-S. Varré, *Algorithms and data structures*, 50h, L2 Computer science, Univ. Lille 1.
- License: J.-S. Varré, *System*, 84h, L3 Computer science, Univ. Lille 1.
- Master: J.-S. Varré, M. Salson, *Software project*, 40h, M1 Computer science, Univ. Lille 1.
- License: P. Marijon *Databases*, 36h, L3 Computer science, Univ. Lille 1.
- License: S. Janot, *Introduction to programming (C)*, 50h, L3 Polytech'Lille, Univ. Lille 1.
- License: S. Janot, *Databases*, 30h, L3 Polytech'Lille, Univ. Lille 1.
- Master: S. Janot, *Databases*, 12h, M1 Polytech'Lille, Univ. Lille 1.
- Master: S. Janot, *Logic and Semantic Web*, 80h, M1 Polytech'Lille, Univ. Lille 1.
- Licence: M. Pupin, *Programming (Python)*, 78h, L1 Sciences, Univ. Lille 1.
- Licence: M. Pupin, *occupational integration*, 30h, L3 computer science, Univ. Lille 1.
- Master: : M. Pupin, *Programming (JAVA)*, 24h, M1 "Mathématiques et finance", Univ. Lille 1.
- License: C. Saad, *Algorithmics and programming*, 28h, L3 Polytech'Lille, Univ. Lille 1.
- License: C. Saad, *Databases*, 36h, L3 Polytech'Lille, Univ. Lille 1.
- License: C. Saad, *Data structures*, 18h, L3 Polytech'Lille, Univ. Lille 1.
- License: C. Saad, *Introduction to programming (C)*, 34h, L3 Polytech'Lille, Univ. Lille 1.
- License: C. Saad, *Programming (C)*, 22h, L3 Polytech'Lille, Univ. Lille 1.
- License: M. Salson, *Programming (Python)*, 42h, L1 Sciences, Univ. Lille 1.
- License: M. Salson, *Coding and information theory*, 63h, L2 Computer science, Univ. Lille 1.

Teaching in bioinformatics:

- License: S. Blanquart, R. Chikhi, M. Giraud, *Bioinformatics*, 40h, L3 Computer Science, Univ. Lille 1.
- Master: S. Blanquart, *Algorithms and applications in bioinformatics*, 24h, M1 Computer Science, Univ. Lille 1.
- Master: S. Blanquart, *Methods in phylogenetics*, 4h, M2 Biodiversité Evolution Ecologie, Univ. Lille 1.
- Master: L. Noé, *Bioinformatics*, 40h, M1 Biotechnologies, Univ. Lille 1.
- Master: M. Pupin, *Bioinformatics*, 34h, M1 "Biologie-Santé", Univ. Lille 1.
- Master: M. Salson, *Algorithms for life sciences*, 20h, M2 Complex models, algorithms and data, Univ. Lille 1.

Teaching in skeptical thinking:

- License: M. Giraud, 35h, L3 Computer science, Univ. Lille 1.
- Master: M. Salson, *Skeptical thinking*, 27h, M2 Journalist and Scientist, ESJ, Univ. Lille 1.

Formation for academics:

- Bilille permanent training: S. Blanquart (*Phylogenetics*, 28h), M. Pupin (*Gene prediction and protein annotation*, 14h), J.S. Varré (*Gene prediction and protein annotation*, 14h), C. Saad (*Variants*, 13h), R. Chikhi (*De novo assembly and Metagenomics de novo assembly*, 8h), H. Touzet (*Metagenomics*, 3h), L. Noé (*DNAmapping*, 3h), M. Salson (*RNA-seq analysis*, 1h).
- Workshop on Genomics (Czech Republic): R. Chikhi *De novo assembly*, 8h, young researchers.
- Roscoff summer school in Bioinformatics: R. Chikhi *De novo assembly*, 8h, engineers and researchers.
- Software training (Granada, Spain and Rennes, France): R. Chikhi *Using the GATB library*, 2x8h, engineers and researchers.

9.2.2. Teaching administration

- Head of the licence semester “Computer Science – S3 Harmonisation (S3H)”, Univ. Lille 1 (L. Noé).
- Member of faculty council (M. Pupin, J.-S. Varré).
- Head of the 3rd year of licence of computer science, Univ. Lille 1 (J.-S. Varré).
- Head of the GIS department (Software Engineering and Statistics) of Polytech'Lille (S. Janot).
- Head of the computer science modules in the 1st year of Licence, Univ. Lille 1 (M. Pupin).

9.2.3. Supervision

- PhD: L. Siegwald, Solutions d'amélioration des études de métagénomique ciblée, 2017/03/23, H. Touzet, Y. Lemoine.
- PhD: P. Pericard, Algorithmes pour la reconstruction de séquences de marqueurs conservés dans des données de métagénomique, 2017/10/27, H. Touzet, S. Blanquart.
- PhD in progress: T. Rocher, Indexing VDJ recombinations in lymphocytes for leukemia follow-up, 2014/11/01, M. Giraud, M. Salson.
- 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: Q. Bonenfant, Algorithmes pour l'analyse de séquençage ARN troisième génération, 2017/11/15, L. Noé, H. Touzet.
- PhD in progress: P. Marijon, Analyse de graphes d'assemblage issus du séquençage ADN troisième génération, 2016, R. Chikhi, J-S. Varré.

9.2.4. Juries

- H. Touzet was member of the PhD juries of Antoine Limasset (Université Rennes 1), Anna Kuosmanen (University of Helsinki), Jean-Pierre Glouzon (University of Sherbrooke), Guillaume Madeleine (Université Lille 1) and Jananan Pathmanathan (UPMC).
- R. Chikhi was member of the PhD juries of Kamil Salikhov (Université de Paris-Est) and Guillaume Holley (Bielefeld University).
- M. Salson was member of the PhD jury of Alice Héliou (Université Paris-Sud).
- H. Touzet was member of hiring committees (professors) at Université de Nantes and Université de Strasbourg.

9.3. Popularization

- *Recruiting girls to computer science* M. Pupin and T. Rocher are members of the collective *Informatique au féminin* from University of Lille, which was launched three years ago and whose goal is to organize computer science initiatives that reach teenage girls and female students. Among other actions, they were fully involved in the event *L codent, L créent* (she codes, she creates). This action aims to teach code to schoolgirls (13-15 years old), before they amass prejudices against computer science. 35 teenage girls were supervised by 9 female graduate computer science students, to create a proximity link between the young women. To emphasize the fact that coding is a creative and innovative pursuit, we chose to teach *Processing*, a programming language built for visual arts. After eight sessions of creative coding, a public exhibition was organized at the University with inspirational testimonies of women working in the field of computer science. This experiment has been presented at the conference PyParis2017 [30] and at the ACM conference womENcourage2017 [31].
- The team participates to dissemination actions for high school students and high school teachers on a regular basis: multiple presentations on bioinformatics and research in bioinformatics with our dedicated “genome puzzles”, practical session at “Day for Programming and Algorithmic Teaching”, presentations at “Salon de l’étudiant”, visit of high school students in the team (M. Giraud, M. Salson, J.-S. Varré)
- *Explaining big data to a general audience*: H. Touzet was part of the editorial committee and author for the book “*Les big data à découvert*”(368 pages).

FUN Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- Nathalie Mitton is a member of the Steering committee of CIoT
- Nathalie Mitton is symposium chair of Wireless Ad hoc and Sensor Networks symposium ICNC 2017
- Farouk Mezghani was publicity chair for Pe-wasun 2017

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

- Valeria Loscri is/was (co)-program chair for IoT and SmartCities MMSys 2017 and 2018, CITS 2018, Globecom 2017, NDIDO 2017 (Nouveaux Defis de l'Internet des Objets - 2017)
- Valeria Loscri is a Member of the Scientific Committee for the Conference Challenges of IoT in Digital Tools & Uses Congress
- Nathalie Mitton is/was (co)-program chair for WSCP 2017, TENCON 2017, VTC2017, SWC 2017, Globecom 2017, IINTEC 2017, WiMob 2017 and Pe-Wasun 2017. She will be (co-)program chair for CCNC 2018, ICT 2018, CIoT 2018, ICC 2018

10.1.2.2. Member of the Conference Program Committees

- Valeria loscri is/was member in the Technical Program Committee (TPC) CoRES 2018, IoT Global Innovation Forum 2017, ICNSC 2017, NTMS 2017 and 2018, GIOTS 2017 and 2018, WF-5G'18 (2018 IEEE 1st 5G World Forum 2018), CSCN 2017, MoWNet 2017, VTC 2017, VTC 2018 - Spring, WPMC 2017, NEW2AN WSMART 2017, WiMob 2017, WPMC 2017, IoTGIF 2017
- Nathalie Mitton is/was in the Technical Program Committee (TPC) ICC 2017, VTC 2017, CSCN 2017, Cores 2017, Algotel 2017, Globecom 2017, CIoT 2017, ICT2018, ICNC 2018
- Farouk Mezghani was in the TPC of ISNCC 2017
- Antoine Gallais was/is in the TPC of ICNC 2017, GIIS 2017 and ICNC 2018

10.1.3. Journal

10.1.3.1. Guest editorial activities

- Valeria Loscri and Nathalie Mitton were co-editor of MMTC COM-SOC letter of issue on Visible Light Communications
- Nathalie Mitton was co-editor of MMTC COM-SOC letter of November issue on Industrial Wireless Sensor Networks
- Valeria Loscri is a member of the 'Research Group on IoT Communications and Networking Infrastructure' at ComSoc Communities
- Valeria Loscri was co-editor of IEEE Access journal special issue on Body Area Networks
- Valeria Loscri edited the book "Vehicular Social Networks", Taylor and Francis Group, 2017
- Valeria Loscri participated to the revue "Internet des Objets" iSTE OpenScience

10.1.3.2. Member of the Editorial Boards

- 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 is editorial board member of Wiley Transactions Emerging Telecommunications Technologies since 2016
- Nathalie Mitton is editorial board member of Wireless Communications and Mobile Computing since 2016
- Valeria Loscri is editorial board member of IEEE Transactions on Nanobioscience journal since 2017
- Valeria Loscri is editorial board member of Elsevier Computer Networks journal since 2016
- Valeria Loscri is editorial board member of Robotics Software Design and Engineering of the International Journal of Advanced Robotic Systems since 2016
- Valeria Loscri is editorial board member of Elsevier Journal of Networks and Computer Applications (JNCA) journal since 2016

10.1.4. Invited Talks

- Valeria Loscri was invited speaker at Smart City Communication day in Sophia-Antipolis on January 2017
- Valeria Loscri was invited speaker at FET-European CIRCLE Workshop, Dublin - May 2017
- Valeria Loscri was invited speaker at Workshop on Retrofitting London and Paris via the Internet of Things - London, July 2017
- Valeria Loscri was invited speaker at IoT Week on December 2017
- Julien Vandaele was invited speaker at JDEV 2017 in Marseille in July 2017
- Antoine Gallais was invited speaker at the "Workshop sur l'IoT" in Sfax, Tunisia, in November 2017
- Nathalie Mitton was invited speaker at SOSI at INSA Rouen in September 2017
- Nathalie Mitton was invited speaker at Chile delegation in Lille in September 2017
- Nathalie Mitton was invited speaker at Journees Logistiques in Lille, September 2017
- Nathalie Mitton was invited speaker at Inria Chile - Universidad Católica Seminar in Santiago de Chile, November 2017

10.1.5. Leadership within the Scientific Community

- Nathalie Mitton is a member of the Steering Committee of the GDR Rescom
- Valeria Loscri is a Member of Social Network Technical Committee
- Valeria Loscri is a Member of Emerging Technologies Initiatives for Molecular, Biological and Multi-Scale Communications (ETI-MBMC)
- Valeria Loscri is a Member of Social Network Technical Committee

10.1.6. Scientific Expertise

Nathalie Mitton is an elected member of the evaluation community of Inria. She has acted as a reviewer for ANRT and ANR project submissions. She is also member of the scientific committees of the competitiveness cluster of MATIKEN and for CITC (International Contactless Technologies Center).

Valeria Loscri is Scientific European Responsible for Inria Lille - Nord Europe. She has been reviewer in the context of 2017 Air Force Young Investigator Research Program. She is reviewer in the context of ERC Consolidator Grant. She is reviewer for Equipes Associées. She has been involved as digital communication expert in the activities of "Convergences du Droit et du Numérique" - Bordeaux, February and September 2017.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

E-learning

Mooc, Nathalie Mitton, "Villes intelligentes : défis technologiques et sociétaux" , 5-week mooc by the IPL CityLab@Inria team, FUN, Inria, in March and November 2017

SPOC, EIT Digital "Technological challenges of participatory Smart cities", 5-week by the IPL CityLab@Inria team in November 2017

Master: Valeria Loscri, Objets Communicants, 24h (Mineure Habitat Intelligent), Ecole des Mines de Douai, France

Master: Nathalie Mitton, Wireless sensor networks, 16h eqTD (Master MINT), Université Lille 1 and Telecom Lille 1, France

Bsc: Farouk Mezghani, Contactless technologies, 20h eqTD, Université de Valenciennes, France

Licence: Jean Razafimandimby, Algorithms and Programming, 30h eqTD, Université Lille 1, France

10.2.2. Supervision

PhD defended on January 24th 2017: Viktor Toldov, Interférence et consommation dans les réseaux de capteurs, Université Lille 1, 2013-2016, Nathalie Mitton and Laurent Clavier

PhD defended on October 18th 2017: Jean Razafimandimby, Distributed Cooperation and Communication among Heterogeneous Devices, Université Lille 1, 2014-2017, Nathalie Mitton and Valeria Loscri

PhD in progress: Aziz Mbacke, Smart Deployment of heterogeneous sensors and RFID in a Smart City, Université Lille 1, 2015-2018, Nathalie Mitton and Hervé Rivano (Urbanet)

PhD in progress: Jad Nassar, Ubiquitous networks for smart grids, Université Lille 1, 2015-2018, Nathalie Mitton and Nicolas Gouvy (HEI)

10.2.3. Juries

- PhD/HDR committees:
 - Valeria Loscri is/was reviewer of the PhD thesis of Jorge Herrera, Universidade Politecnica Valencia, Spain May 2017.
 - Nathalie Mitton is/was reviewer of the following PhD thesis:
 - * Patrick Olivier Kamgueu, Univ. de Yaounde - Univ. de Lorraine, January 2018
 - * Carlos Gonzales, Université de Reims, December 2017
 - * Dareen Shehadeh, Telecom Bretagne, December 2017
 - * Arbia Sfar, UTC, November 2017
 - * Faycal Ait Aoudia, Université de Rennes 1, September 2017
 - * Laurent Reynaud, Univ. Lyon 1, March 2017
 - * Jean-Gabriel Krieg, EINSEITH, February 2017
 - Nathalie Mitton was a member of the HDR defense committee
 - * Antoine Gallais, Université de Strasbourg, November 2017
 - * Gentian Jakllari, EINSEEIHT, November 2017
- Researcher selection committees:
 - Nathalie Mitton was member of the Inria CR2 Lille competition selection committee
 - Nathalie Mitton was member of the Professor competition selection committee at UPMC and EINSEITH

- Nathalie Mitton was member of the Assistant Professor (MdC) at Universités de Marseille, Valenciennes and Strasbourg and INSA Lyon
- Nathalie Mitton is a member of the scientific committee of "Convergences du Droit et du Numérique"

10.3. Popularization

- Simon Duquennoy and Nathalie Mitton gave a talk at "30 min de Sciences" in June and December 2017 resp.
- Valeria Loscri, Antonio Costanzo and Nathalie Mitton gave a talk in the context of Nuneriqu'elle - Euratechnologies, November 2017
- Matthieu Berthome, Jad Nassar, Ibrahim Amadou, Antonio Costanzo, Antoine Gallais, Nathalie Mitton, Farouk Mezghani and Julien Vandaele gave some talks in high schools for the "Fête de la Science" in October 2017
- Nathalie Mitton gave an interview for France Info on connected objects

RMOD Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. Member of the Organizing Committees

- Marcus Denker and Stéphane Ducasse are in the board of ESUG and organized ESUG 2017, the yearly Smalltalk conference that brings together research and industry <http://www.esug.org/>
- RMoD organized Pharo Days 2017, the yearly Pharo meeting of both industrial and research users
- Serge Demeyer served as organizing chair for the BENEVOL 2017 Workshop <http://ansymore.uantwerpen.be/events/benevol2017>

10.1.2. Scientific Events Selection

10.1.2.1. Chair of Conference Program Committees

- Anne Etien refused to be program chair of SCAM 2017 (International Working Conference on Source Code Analysis & Manipulation) because of financial matter, to keep the money for a PhD student to travel and presents his work
- Anne Etien was chair of the artifact evaluation track of VISSOFT 2017 <http://vissoft17.dcc.uchile.cl/>
- Anne Etien served as chair for IWST 2017
- Serge Demeyer served as chair for the industrial track of the POEM 2017 International Conference <https://kuleuvencongres.be/poem2017/>

10.1.2.2. Member of the Conference Program Committees

- Marcus Denker: SANER 2017 (23rd IEEE International Conference on Software Analysis, Evolution, and Reengineering)
- Clément Béra: IWST 2017 (International Workshop on Smalltalk Technologies)
- Nicolas Anquetil SCAM 2017 (International Working Conference on Source Code Analysis & Manipulation)
- Nicolas Anquetil BENEVOL 2017 (BELgian-NEtherlands software eVOLution seminar)
- Anne Etien BENEVOL 2017 (BELgian-NEtherlands software eVOLution seminar)
- Anne Etien SATToSE 2017 (Seminar on Advanced Techniques & Tools for Software Evolution)
- Anne Etien ME 2017 (Workshop on Model Evolution)

10.1.2.3. Reviewer

- Thibault Raffaillac: IWST 2017 (International Workshop on Smalltalk Technologies)
- Thibault Raffaillac: ManLang 2017 (formerly PPPJ, Managed Languages and Runtimes)
- Clément Béra: ManLang 2017 (formerly PPPJ, Managed Languages and Runtimes)

10.1.3. Journal

10.1.3.1. Reviewer - Reviewing Activities

- Clément Béra: JUCS 2017 (Journal of Universal Computer Science)
- Nicolas Anquetil did Reviews for the following international journals:
 - TSE (IEEE Transactions on Software Engineering)

- TOSEM (ACM Transactions on Software Engineering and Methodology)
- IET Software
- SCICO (Science of Computer Programming)
- JISYS (Journal of Intelligent Systems)
- JUCS (Journal of Universal Computer Science)

10.1.4. Invited Talks

- Stéphane Ducasse and Guillermo Polito did a keynote presentation in Modularity 2017, hosted within Programming 2017
- Nicolas Anquetil: Friday November, 10 2017, invited talk at LIRMM (Montpellier)

10.1.5. Scientific Expertise

Nicolas Anquetil: Grant reviewer for NSERC (Natural Sciences and Engineering Research Council of Canada)

10.1.6. Research Administration

Nicolas Anquetil: GDR/GPL (Groupement de Recherche Génie de la Programmation et du Logiciel), animation of the Rimel group (Rétro-Ingénierie, Maintenance et Evolution des Logiciels)

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Licence: Nicolas Anquetil, Graphes et langages, 32h, L2, Univ. Lille 1, IUT-A, France

Licence: Nicolas Anquetil, Conception et programmation objet avancées, 28h, L2, Univ. Lille 1, IUT-A, France

Licence: Nicolas Anquetil, Principes des systèmes d'exploitation, 40h, L2, Univ. Lille 1, IUT-A, France

Licence: Nicolas Anquetil, Conception et développement d'applications mobiles, 30h, L2, Univ. Lille 1, IUT-A, France

Licence: Nicolas Anquetil, Méthodologie de la production d'applications, 33h, L2, Univ. Lille 1, IUT-A, France

Licence: Nicolas Anquetil, Modélisations mathématiques, 14h, L2, Univ. Lille 1, IUT-A, France

Licence: Nicolas Anquetil, Conception et programmation objet, 24h, L2, Univ. Lille 1, IUT-A, France

Licence: Stéphane Ducasse, OOP, 21h Prague technical University

Licence: Anne Etien, Bases de données, 22h, L3, Polytech-Lille, France

Licence: Damien Pollet, Java, data structures and algorithms lecture, 50h, L3, Telecom Lille, France

Licence: Damien Pollet, Java lecture, 20h, L3, Telecom Lille, France

Licence: Damien Pollet, Java project, 20h, L3, Telecom Lille, France

Licence: Damien Pollet, Computer architecture, 10h, L3, Telecom Lille, France

License: Damien Pollet, Developer communities, 35h, L3, Université de Lille, France

Master: Anne Etien, Metamodelisation for Reverse Engineering, 25h, M2, Montpellier, France

Master: Anne Etien, Test et Maintenance, 10h, M2, Polytech-Lille, France

Master: Anne Etien, Test et Maintenance, 14h, M2, Polytech-Lille, 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, 20h, M1, Polytech-Lille, France

Master: Anne Etien, Qualité logicielle, 8h, M2, University Lille 1, France
 Master: Clément Béra, Software engineering, 30h, M2, Universite de Lille 1, France
 Master: Damien Pollet, Technologies for information systems, 30h, M1, Telecom Lille, France
 Master: Damien Pollet, Network algorithms, 30h, M2, Telecom Lille, France
 Master: Damien Pollet, Software engineering, 6h, M1, Telecom Lille, France
 Master: Stéphane Ducasse, Meta Programming, 12h, IMT Douai
 Master: Stéphane Ducasse, Advanced Design, 24h, Catholic University of Lviv.
 Master: Nicolas Anquetil, Qualité logicielle, 8h, M2, University Lille 1, France
 Master: Nicolas Anquetil, Visualisation for Reverse Engineering, 6h, M2, Montpellier, France
 Master: Thibault Raffaillac, ACT, 34h, M1, University Lille 1, France
 Master: Christophe Demarey, Intégration Continue, 4h, M2, GIS2A5, Polytech-Lille, France
 Master: Christophe Demarey, Intégration Continue, 12h, M2, IAGL, Univ. Lille 1, France
 PhD: Stéphane Ducasse, Advanced Design, 24h, ENIS, Tunisia

10.2.2. Supervision

PhD: Gustavo Santos, *Assessing and Improving Code Transformations to Support Software Evolution*, February 28th, Université Lille 1 (France), Anne Etien, Nicolas Anquetil
 PhD: Vincent Blondeau, *Test Selection Practices in a Large IT Company*, CIFRE WorldLine, November 8th, Université Lille 1 (France), Anne Etien, Nicolas Anquetil
 PhD: Marco Naddeo, *A modular Approach of Object initialization for Pharo*, Université de Turin, November 2017, Prof. V. Bono, Stéphane Ducasse
 PhD: Clément Béra, *Sista: a Metacircular Architecture for Runtime Optimisation Persistence*, 9/2017, Université Lille 1 (France), Marcus Denker, Stéphane Ducasse
 PhD in progress: Pablo Tesone, *Hot Software Update In Robotics Applications*, IMT Lille-Douai, started in Apr 2016, Luc Fabresse, Stéphane Ducasse
 PhD in progress: Brice Govin, *Support to Implement a Rejuvenated Software Architecture in Legacy Software* CIFRE Thales, started Jan 2015, Anne Etien, Nicolas Anquetil, Stéphane Ducasse
 PhD in progress: Jason Lecerf, *Reuse of Code Artifacts for Embedded Systems Through Refactoring*, started Oct 2016, CEA Thierry Goubier, Stéphane Ducasse
 PhD in progress: Thibault Raffaillac, *Languages and System Infrastructure for Interaction*, started 2/11/2015, Shared PhD, S. Huot, Stéphane Ducasse
 PhD in progress: Julien Delplanque, *Software Engineering Techniques Applied to Databases*, started Oct 2017, Anne Etien, Nicolas Anquetil

10.2.3. Juries

Stephane Ducasse: *Augmenting Type Inference with Lightweight Heuristics*, Nevena Lazarevic, University of Bern, Switzerland, 20/06/17.
 Stephane Ducasse: *Étendre des interpréteurs par détournement, ou comment étendre des interpréteurs sans en modifier le code*, Florent Marchand de Kerchove, Université de Nantes, France. 18/11/16.
 Serge Demeyer: Davy Landman, PhD thesis, *Reverse Engineering Source Code: Empirical Studies of Limitations and Opportunities*, October 5th 2017, Universiteit van Amsterdam (Netherlands)
 Serge Demeyer: Robert Minelli, PhD thesis, *Interaction-Aware Development Environments — Recording, Mining, and Leveraging IDE Interactions to Analyze and Support the Development Flow*, November 13th 2017, Universita della Svizzera italiana (Switzerland)

Serge Demeyer: Vincent Blondeau, PhD thesis, *Test Selection Habits of Developers in a Large IT Company*, October 8th 2017, Inria Lille - Nord Europe (France)

Anne Etien: Xuan Sang Le, PhD thesis, *Software/FPGA Co-design for Edge-computing: Promoting Object Oriented Design*, May 2017, l'École des Mines de Douai, ENSTA, Brest (France)

Anne Etien: Maroua Hachicha PhD thesis, *Un modèle de prise de décision dynamique basé sur la performance des processus métiers collaboratifs*, April 3rd 2017, Université de Lyon 2 (France)

Anne Etien: Gustavo Santos, PhD thesis, *Assessing and Improving Code Transformations to Support Software Evolution*, Februrary 28th, Université Lille 1 (France)

Anne Etien: Vincent Blondeau, PhD thesis, *Test Selection Practices in a Large IT Company*, November 8th, Université Lille 1 (France)

Marcus Denker: PhD thesis, *Clément Béra, Sista: a Metacircular Architecture for Runtime Optimisation Persistence*, 9/2017, Université Lille 1 (France)

Nicolas Anquetil: Luís Ferreira da Silva, PhD thesis, *A Pattern-Based Approach to Scaffold the IT Infrastructure Design Process*, Dec. 20th, 2017, University Nova de Lisboa, Lisboa (Portugal)

Nicolas Anquetil: Gustavo Santos, PhD thesis, *Assessing and Improving Code Transformations to Support Software Evolution*, Februrary 28th, Université Lille 1 (France)

Nicolas Anquetil: Vincent Blondeau, PhD thesis, *Test Selection Practices in a Large IT Company*, November 8th, Université Lille 1 (France)

10.3. Popularization

- Article in Popular Magazine: Clément Béra and Olivier Auverlot. Au coeur de la VM Pharo. In GNU/Linux Magazine, numéro 210, décembre 2017.
- Book: Pharo by Example 5, Square Bracket Associates, 2017 [37].
<http://books.pharo.org/updated-pharo-by-example/>
- RMOD co-organized and participated at ESUG 2017.
<http://www.esug.org/wiki/pier/Conferences/2017>
- Multiple public Pharo Sprints in Lille.
<https://association.pharo.org/events>
- A MOOC for Pharo is online (Stéphane Ducasse).
<http://mooc.pharo.org>
- Thibault Raffaillac: Co-organized the hub at the IUT for the CCC contest.
<https://informatique.univ-lille1.fr/ccc/2017/contest/>
- Thibault Raffaillac: Organizing weekly programming trainings (10 students per session).
- Julien Deplanque organized Advent Of Code 2017 for Pharo.
<https://github.com/juliendelplanque/AdventOfCode2017WithPharo>
- Christophe Demarey gave a Talk at ncrafts about Pharo.
<http://bordeaux.ncrafts.io>

SPIRALS Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Selection

10.1.1.1. Chair of Conference Program Committees

Laurence Duchien

Doctoral Symposium of European Conference on Software Architecture (ECSA)

10.1.1.2. Member of the Conference Program Committees

Laurence Duchien

International Conference on Web Engineering (ICWE)

European Conference on Software Architecture (ECSA)

International Systems and Software Product Line Conference (SPLC)

BElgian-NETherlands software eVOLution symposium (BENEVOL)

International Conference on Software Engineering education and Training (CSEE&T)

Joint 5th ICSE International Workshop on Software Engineering for Systems-of-Systems and 11th Workshop on Distributed Software Development, Software Ecosystems and Systems-of-Systems (SESoS/WDES)

Philippe Merle

International Conference on Cooperative Information Systems (CoopIS)

International Symposium on Theoretical Aspects of Software Engineering (TASE)

International Conference on Web Engineering (ICWE)

International Conference on Cloud Computing, GRIDs, and Virtualization (CLOUD COMPUTING)

International Conference on Advanced Service Computing (SERVICE COMPUTATION)

Symposium on Machine Learning and Metaheuristics Techniques and Applications for Dependable Distributed Systems (MADS)

International Symposium on Security in Computing and Communications (SSCC)

International Workshop on Adaptive and Reflective Middleware (ARM)

Workshop on CrossCloud Infrastructures & Platforms (CrossCloud)

Martin Monperrus

International Conference on Software Engineering (ICSE)

Genetic Improvement Workshop (GI)

Clément Quinton

International Workshop on Dynamic Software Product Lines (DSPL)

Romain Rouvoy

- International Conference on Pervasive Computing and Communications (PerCom)
- IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft)
- International Symposium on Applied Computing (SAC), track on Dependable, Adaptive, and Trust-worthy Distributed Systems (DADS)
- International Conference on Service Oriented Computing (ICSOC)
- International Conference on Principles of Distributed Systems (OPODIS)
- International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)
- International Conference on Ambient Systems, Networks and Technologies (ANT)
- International Conference on Information Systems Development (ISD)
- International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP)
- International Symposium on Computers and Communication (ISCC)
- International Workshop on Scalable Computing For Real-Time Big Data Applications (SCRAMBL)

Lionel Seinturier

- IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft)
- International Conference on Service Oriented Computing (ICSOC)
- ACM Symposium on Applied Computing (SAC), tracks Software Architecture Theory Technology and Applications (SA-TTA), Operating Systems (OS)
- Euromicro Conference on Software Engineering and Advanced Applications (SEAA), track Model-based development Components and Services (MOCS)
- International Workshop on Models@run.time @ MODELS
- International Workshop on Models@run.time @ ICAC
- Workshop on Context-Oriented Programming (COP) @ ECOOP

10.1.2. Journal

10.1.2.1. Member of the Editorial Boards

Martin Monperrus is member of the editorial board of the international journal Springer Empirical Software Engineering (IF-2016: 3.275).

Romain Rouvoy is member of the editorial board of the journal Lavoisier Technique et Science Informatiques (TSI).

Lionel Seinturier is editor for software engineering of the ISTE-Wiley Computer Science and Information Technology book collection.

10.1.2.2. Reviewer - Reviewing Activities

Laurence Duchien: IET Software, IEEE Software, Wiley Software: Practice and Experience (SPE).

Philippe Merle: ACM Transactions on Internet Technology (TOIT), Wiley Journal of Software Testing, Verification and Reliability (STVR), International Journal of Web Services Research (IJWSR), Springer Journal of Cloud Computing, IEEE Cloud Computing.

Martin Monperrus: IEEE Transactions on Software Engineering (TSE), ACM Transactions on Software Engineering and Methodology (TOSEM), Elsevier Journal of Systems and Software (JSS), IEEE Transactions on Reliability (TR).

Clément Quinton: Elsevier Journal of System and Software (JSS), IEEE Software, IET Software, IEEE Transactions on Services Computing (TSC).

Romain Rouvoy: Elsevier Sustainable Computing, Informatics and Systems (SUSCOM), IEEE Transactions on Software Engineering (TSE), Springer Journal of Internet Services and Applications (JISA), Wiley Journal of Software: Evolution and Process (JSEP).

Lionel Seinturier: Elsevier Journal of System and Software (JSS), ACM Transactions on Internet Technology (TOIT), Elsevier Computer Languages, Systems and Structures (COMLAN), Journal of Universal Computer Science (JUCS), Ingénierie des systèmes d'information (ISI), Elsevier Future Generation Computer Systems (FGCS).

10.1.3. Invited Talks

Philippe Merle, Walid Gaaloul and **Faiez Zalila** were invited to give a tutorial on "Seamless Lifecycle Management of Cloud Resources Using OCCI" at Services Conference Federation (SCF) 2017.

Martin Monperrus was invited to give a talk on "When and how to automatically repair bugs?" at the 4th Workshop on Design Automation for Understanding Hardware Designs (DUHDe 2017).

10.1.4. Leadership within the Scientific Community

Martin Monperrus is the co-head of the "Groupe de Travail Génie Logiciel Empirique" of the GDR GPL.

Romain Rouvoy is the co-head of the "Groupe de Travail Génie Logiciel pour les Systèmes Cyber-physiques" of the GDR GPL.

10.1.5. Scientific Expertise

Laurence Duchien did some scientific expertise for Direction des Relations Internationales of the French Ministry of Research.

Philippe Merle was member of the recruitment committee for assistant professors at INSA Toulouse. He is member of the Inria Scientific Board.

Lionel Seinturier was member of the recruitment committee for junior researchers at Inria Rennes. He was scientific expert for ANRT, ECOS Nord, COFECUB, Belgium FWO. He was member of the Agence Nationale de la Recherche (ANR) Scientific Evaluation Committee for Software and Network (CES25).

10.1.6. Research Administration

Laurence Duchien is member of the CNRS CoCNRS section 6 committee, and of the "bureau" of this committee. She was member of Hcéres committees for DIENS Laboratory (Paris) and LIS Laboratory (Marseille).

Philippe Merle is president of the CUMI (Comité des Utilisateurs des Moyens Informatiques), project manager for Irill at Lille, secretary of the CLHSCT (Comité Local d'Hygiène, de Sécurité et de Conditions de Travail), and member of the centre committee for the Inria Lille - Nord Europe research center. He is member of the steering committee of the Inria's continuous integration service. He is leading the CIRRUS research joint team between Scalair company and Spirals Inria project-team. He was the scientific and technical leader of the OCCIware PIA funded project. He is member of the steering committee of CIEL (Conférence en IngénierIE du Logiciel).

Lionel Seinturier is president of the CDT (Commission Développement Technologique), and member of the BCEP (Bureau du Comité des Équipes-Projets), for the Inria Lille - Nord Europe research center. He heads the committee (so-called "vivier 27 rang A") that selects members of recruitment committees in Computer Science at the University of Lille 1. He is Scientific Advisor for the evaluation of ICT research laboratories at the Hcéres.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Pierre Bourhis is, in addition to his tenure junior research position at CNRS, chargé d'enseignement spécialité Sciences des données at École Polytechnique, Palaiseau, France, in the Department of Computer Sciences (DIX).

Bases de données, 18h, Cycle Polytechnique Info553

Laurence Duchien teaches at the University of Lille 1 in the FST faculty. She heads the Carrières et Emplois service and is referent for the professional insertion in the PhD program in Computer Science at ComUE University Lille Nord de France. She is Director of Doctoral Studies for Computer Science in the 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 in the FST faculty. Until August 2017, he has headed the **IAGL** specialty of the Master of Computer Science at the University of Lille 1.

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

Clément Quinton teaches at the University of Lille 1 in the FST faculty.

Design of distributed applications, 42h, Level M1, Master of Computer Science

Software engineering, 42h, Level M1, Master of Computer Science

Advanced design of distributed applications, 37.5h, Level M2, Master MIAGE

Infrastructure and frameworks for the Internet, 33.75h, Level M2, Master of Computer Science

Software product lines, 7.5h, Level M2, Master of Computer Science

Suivi de stages et de projets, 30h, Licence and Master of Computer Science Science

Romain Rouvoy teaches at the University of Lille 1 in the FST faculty. He heads the **Master of Computer Science** program at the University of Lille 1.

Design of distributed applications, 12h, Level M1, Master of Computer Science

Object-oriented design, 4h, Level L3, Licence of Computer Science

Suivi de projets, 20h, Level M2, Master of Computer Science

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

GIS4 Programmation par Objets, 32h

GIS4 Architectures Logicielles, 26h

GIS2A3 (apprentissage) Projet programmation par Objet, 24h

IMA2A4 (apprentissage) Conception Modélisation Objet, 24h

IMA3 Programmation Avancée, 62h

GBIAAL4 Bases de données, 22h

GISS5 Suivi de projets, 42h

GIS2A (apprentissage) Suivi d'apprentis, 28h

Lionel Seinturier teaches at the University of Lille 1 in the FST faculty. He heads the Computer Science Department at the Faculty of Science and Technology of the University of Lille 1.

Conception d'Applications Réparties, 50h, Level M1, Master MIAGE

Infrastructures et Frameworks Internet, 70h, Level M2 E-Services IAGL TIIR, Master of Computer Science

10.2.2. Supervision

PhD in progress: Zeinab Abou Khalil, November 2017, Laurence Duchien, co-supervision with Tom Mens (University of Mons, Belgium).

PhD in progress: Guillaume Fieni, GreenData : Vers un traitement efficient et éco-responsable des grandes masses de données numériques, October 2017, Romain Rouvoy & Lionel Seinturier.

PhD in progress: Benjamin Danglot, Software Testing Amplification, December 2016, Martin Monperrus & Lionel Seinturier.

PhD in progress: Lakhdar Meftah, Cartography of the Quality of Experience for Mobile Internet Access, November 2016, Romain Rouvoy, co-supervision with Isabelle Chrisment (Inria Madynes).

In progress PhD: Sarra Habchi, Une supervision de contexte sensible à la confidentialité pour les développements logiciels en crowdsourcing, October 2016, Romain Rouvoy.

PhD in progress: Antoine Vastel, Cartographie de la qualité d'expérience pour l'accès à l'internet mobile, October 2016, Romain Rouvoy & Walter Rudametkin.

PhD in progress: Yahya Al Dhuraibi, Un cadre flexible pour l'élasticité dans les nuages, October 2015, Philippe Merle.

PhD in progress: Stéphanie Challita, Un cadre formel et outillé pour la gestion de toute ressource en nuage, October 2015, Philippe Merle.

PhD in progress: Thomas Durieux, Search-based Monitoring and Root Cause Diagnosis in Production, September 2015, Lionel Seinturier & Martin Monperrus.

PhD in progress: Gustavo Sousa, Towards Dynamic Software Product Lines to Optimize Management and Reconfiguration of Cloud Applications, October 2012, Laurence Duchien & Walter Rudametkin Ivey.

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

10.2.3. Juries

Laurence Duchien

Hanae Rateau, Université Lille, chair

Sylvain Defourny, Université Lille, chair

Thi-Kim-Dung Pham, Conservatoire National des Arts et Métiers, examiner

Xhevahire Ternava, Université Côte d'Azur, chair

Julien Perolat, Université Lille, chair

Philippe Merle

Mohamed Boussaa, Université Rennes 1, reviewer

Jean-François Weber, Université de Franche-Comté, reviewer

Martin Monperrus

Bogdan Marculescu (Blekinge Institute of Technology, Sweden), member

Romain Rouvoy

Stéphane Delbruel (University of Rennes 1), reviewer
Yaroslav Hayduk (University of Neuchâtel, Switzerland), reviewer
Gustavo Sousa (University of Lille 1), president
Sabbir Hassan (University of Rennes 1), examiner
Yunbo Li (IMT Atlantique), examiner
Cyril Cecchinel (University Côte d'Azur), reviewer
Elyas Ben Hadj Yahia (University of Bordeaux), reviewer
Marcelino Rodriguez Cancio (University of Rennes 1), reviewer

Lionel Seinturier

HDR Abderrahmane Seriai (University of Montpellier), president
HDR Bilel Derbel (University of Lille 1), president
HDR Marc Frincu (University of Timisoara, Romania), examiner
Akram Kamoun (University of Sfax, Tunisia), reviewer
André Sales Fonteles (University of Grenoble), reviewer
Adja Ndeye Sylla (University of Grenoble), reviewer

10.3. Popularization

Lionel Seinturier participated in October to the Chercheur itinérant event organized by the Inria Lille Nord Europe research center in the context of La fête de la science. Two classrooms (2nde and terminale) have been visited. The theme of the visit was crowdsensing and data gathering from mobile devices.

Antoine Vastel participated in October to the Chercheur itinérant event organized by the Inria Lille Nord Europe research center in the context of La fête de la science. Two classrooms (2nde and terminale) have been visited. The theme of the visit was browser fingerprinting and user privacy tracking.

DEFROST Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Selection

10.1.1.1. Member of the Conference Program Committees

Christian Duriez: World Haptic Conference 2017, Pacific Graphics 2017, Soft robotics conference 2018.

10.1.1.2. Reviewer

Alexandre Kruszewski:

- ICRA
- ECC
- ACC
- CDC
- MED
- IFAC World Congress
- ICRA

Olivier Goury:

- IEEE Transactions on Automation Science and Engineering

Damien Marchal:

- Reviewer for VRIPHYS 2017 conference and the Computer & Graphics journal.

Christian Duriez:

- ICRA
- PacificGraphics
- Vriphys

10.1.2. Journal

10.1.2.1. Member of the Editorial Boards

Christian Duriez: IEEE Transaction on Haptics

10.1.2.2. Reviewer - Reviewing Activities

Kruszewki:

- IEEE TCST
- IEEE TFS
- Fuzzy Sets and Systems
- Automatica

Christian Duriez:

- SORO (Soft Robotic Journal)
- IEEE Transactions on Robotics
- IEEE Robotic and Automation Letters

10.1.3. Invited Talks

- Workshop on Computer Animation, Feb 2017, La Barbade
- Mechatronic Conference, Nov 2017, Paris
- Lagadic Seminar, Nov 2017, Rennes

10.1.4. Scientific Expertise

Kruszewski: IDEX project (Univ. Strasbourg)

Duriez:

- ANR project
- EPSRC project (UK)
- Habilitation evaluation (University of Luxembourg)
- IDEX project (Univ. Strasbourg)

10.1.5. Research Administration

A. Kruszewski and C. Duriez are members of the Laboratory council (CRIStAL)

C.Duriez is vice-president of the "Commission des Emplois de Recherche" of Lille

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

- Ingénieur : Kruszewski, Automatique 1, 54h, niveau L3, Centrale Lille, France
- Ingénieur : Kruszewski, Contrôle des systèmes dynamiques, 12h, niveau L4, Centrale Lille, France
- Ingénieur : Kruszewski, Drone, 16h, niveau M1, Centrale Lille, France
- Ingénieur : Kruszewski, Systèmes embarqués, 8h, niveau M1, Centrale Lille, France
- Ingénieur : Kruszewski, Conception d'un système embarqué, 18h, niveau L3, Centrale Lille, France
- Ingénieur : Kruszewski, Automatique 2, 12h, niveau M1, Centrale Lille, France
- Ingénieur : Kruszewski, Automatique, 36h, niveau L3, Centrale Lille, France
- Ingénieur : Kruszewski, Projets, 50h, niveau L3-M1, Centrale Lille, France
- Ingénieur : Kruszewski, Projet recherche, 12h, niveau M1, Centrale Lille, France
- Master : Damien Marchal, Reality-Virtual et Interaction, 24h, M2, University of Lille, France
- Doctorat : Duriez, Modeling and Simulation, 2H, Summer school on surgical simulation, Montpellier, France
- Master : Duriez, Interactive simulation, 24H, M2, University of Lille, France

10.2.2. Supervision

- HdR: Kruszewski, Are polytopic control design methods suitable for the next robotic control challenges?, Université de Lille, 12/12/2017
- PhD: Bieze, Contribution à la modélisation cinématique et au contrôle de manipulateurs déformables, fondée sur la mécanique numérique, Université de Lille, 24/10/2017
- PhD in progress: Largilière, Conception de nouvelles interfaces déformables, contrôlées par une simulation éléments-finis temps-réel, 01/10/2013, C. Duriez, L. Grisoni
- PhD in progress: Thieffry, Modélisation et contrôle de robots déformables à grande vitesse, 01/09/2016, C. Duriez, T.M. Guerra, A. Kruszewski
- PhD in progress: Zhang, New methods of visual servoing for soft-robots, 01/10/2015, C. Duriez, J. Dequidt, A. Kruszewski

PhD in progress: Coevoet, Méthodes d'optimisation pour la robotique déformable, 01/05/2017, C. Duriez

PhD in progress: Eldiwiny, Modélisation, Simulation et Design de micro robots déformables, 01/09/2017, C. Duriez

10.2.3. Juries

- Benoit Le Gouis, C. Duriez président du jury, Rennes, soutenance novembre 2017
- Renato Torres, C. Duriez rapporteur, Paris, soutenance prévue en janvier 2018

10.3. Popularization

Mario Sanz Lopez, Olivier Goury and Christian Duriez participated in "Fête de la science: Opération Chercheurs itinérants", which involves giving scientific lectures in middle and high schools. Olivier Goury and Bruno Carrez participated in the Numéric'elle event, which involved sensitising female middle school students to pursue a career in the digital world. Mario Sanz Lopez installed a new demonstrator on Soft Robotics at Plateau Euratechnologies.

Our team has been highlighted in the medias this year: <https://team.inria.fr/defrost/media/>

LINKS Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Organisation

9.1.1.1. Member of the Conference Program Committees

- I. Boneva was member of the program committees of Alberto Mendelson Workshop 2017.
- P. Bourhis was member of the program committees of IC (Ingénierie des Connaissances) 2017.
- P. Bourhis was the program chair of the demonstration track of BDA (Gestion de Données – Principes, Technologies et Applications) 2017.
- J. Niehren is the chair of the WPTE 2018 workshop collocated with FLOCS in Oxford
- J. Niehren was a member of the program committee of BDA 2017
- J. Niehren was a member of the programm committee of WPTE 2017.
- S. Staworko was member of the program committees of ISWC (International Semantic Web Conference) 2017.
- S. Tison was member of the program committees of FSCD (First International Conference on Formal Structure for Computation and Deduction) 2017.
- S. Tison was member of the program committees of Highlight 2017.

9.1.2. Journal

9.1.2.1. Member of the Editorial Boards

- J. Niehren is editor of Fundamenta Informaticae.
- S. Salvati is managing editor of JoLLI (Journal for Logic, Language and Information).
- S. Tison is in the editorial committee of RAIRO-ITA (Theoretical Informatics and Applications).

9.1.3. Research Administration

- I. Boneva was an elected member of CRISTAL laboratory concil until the December 1st, 2017.
- J. Niehren is member of the Board of the Inria Lille's Board of the Comité des Equipe-Projects.
- J. Niehren is head of the Inria team Links.
- S. Salvati is secretary of the The Association for Logic, Language and Information (<http://www.folli.info>).
- S. Salvati is vice-head of the Inria team Links.
- S. Tison is president of CITC EuraRFID since June 2017.
- S. Tison is a member of coordination committee I-Site ULNE since April 2017.
- S. Tison is a vice president of the University of Lille 1 since October 2015, where she is responsible for industrial partnerships, innovation, and valorisation.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- I. Boneva gives a Master 1 semester on Algorithms for databases.
- F. Capelli organized a research school on Knowledge Compilation at ENS de Lyon in December 2017.

A. Lemay is pedagogical responsible for Computer Science and Numeric correspondent for UFR LEA, Lille 3.

J. Niehren was teaching the course “Foundations of Data and Knowledge Bases” at the University of Cape Coast, Ghana, as part of the PhD summer school of the Academie without Borders.

J. Niehren was teaching the course “Foundations of Databases” as part of the masters 2 Mocad on Information Extraction at the University of Lille 1.

S. Salvati is pedagogical responsible of Master Miage FA, Lille 1.

S. Salvati organised the reasearch label for Computer Science Bachelor, Lille 1.

S. Staworko is pedagogical responsible of the Web Analyst Master, Lille 3.

S. Staworko has created an online lecture on R as part of the partnership between Lille 3 University and Dakar University, Senegal.

S. Tison is pedagogical responsible of first year ACT Master, Lille 1.

S. Tison has organized Catalyst Contest 2017 in Lille.

9.2.2. Supervision

PhD in progress: D. Gallois. Since 2015. Recursive Queries. Supervised by Bourhis and Tison.

PhD in progress: M. Sakho. Hyperstreaming Query answering on graphs. Since 2016. Supervised by Niehren and Boneva.

PhD in progress: J.M. Lozano. On data integration for mixed database formats. Supervised by Boneva and Staworko.

PhD in progress: P. Gallot. On safety of data transformations. Started on October 2017. Supervised by Lemay and Salvati.

Projet de Fin d’Étude (PFE): N. Crosetti. On weighted dependency aggregation. Supervised by Capelli, Niehren and Ramon (Team MAGNET).

9.2.3. Juries

S. Salvati was the reviewer of El Makki VOUNDY’s thesis *Langages ε-sûrs et caractérisations des langages d’ordres supérieurs* defended on November 15, 2017, University of Marseille.

S. Salvati was a member of the jury of Félix Baschenis’ thesis *Minimisation de ressources pour les transductions régulières sur les mots* defended on December 5, 2017, University of Bordeaux.

9.2.4. Selection committees

P. Bourhis was a member of the selection committee for two assistant professorships at the University of Lille III.

A. Lemay was a member of the selection committee for two assistant professorships at the University of Lille III.

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

S. Tison was a member of the selection committee for an assistant professorship at the University of Marne-la-Vallée.

S. Tison was a member of the selection committee for a professorship at the University of Calais.

S. Tison is a member of the jury of “Agrégation de mathématiques, option D”.

9.3. Popularization

Joachim Niehren contributed an article in the december issue of “Inria by Lille” titled “Interroger les bases de données d’une manière plus intelligente”

MAGNET Project-Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. Local Workshops

AURÉLIEN BELLET organized the workshop **Decentralized Machine Learning, Optimization and Privacy**. More than 50 attendees were present for a series of invited talks on Sep 11-12, 2017. The list of speakers was

- Dan Alistarh (IST Austria / ETH Zurich)
- Borja Balle (Amazon Research)
- Keith Bonawitz (Google Research)
- Hamed Haddadi (QMUL / Imperial College London)
- Stephen Hardy (Data61 / CSIRO)
- Mikael Johansson (KTH)
- Peter Richtárik (KAUST / University of Edinburgh)
- Meilof Veeningen (Philips Research)

MIKAELA KELLER co-organized the local workshop Demi-journée Dating bringing together researchers from the local teams Links, Magnet, Sequel and Sigma for an afternoon of presentations and scientific discussions.

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

AURÉLIEN BELLET served as PC member of NIPS'17, ICML'17, AISTATS'18 and MOD'17.

MARC TOMMASI served as senior PC member of IJCAI'17 and PC member of CAP'17, EGC'17, CRI'17, AAAI'18.

MIKAELA KELLER served as PC member of NIPS'17 and CAP'17.

JAN RAMON served as PC member of AISTATS'17, AISTATS'18, IEEE-BigData'17, BNaic'17, CIKM'17, DS'17, ECML/PKDD'17, ICHI'17, IJCAI'17, ISMIS'17, KDD'17, MLG'17, MOD'17, NIPS'17 and TDLSG-ECMLPKDD'17.

RÉMI GILLERON served as PC member of CAP'17, IJCAI'17, NIPS'17, AISTATS'18, ICLR'18.

PASCAL DENIS served as PC member of ACL-17, CAp'17, EACL'17, EMNLP'17, IJCAI'17, IWCS'17, CORBON'17, and NIPS'17.

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

JAN RAMON was member of the editorial board of Machine Learning Journal.

JAN RAMON was member of the editorial board of Data Mining and Knowledge Discovery.

10.1.3.2. Reviewer - Reviewing Activities

JAN RAMON acted as reviewer for project proposals and project follow-up for H2020, COST and SNF (CH). AURÉLIEN BELLET was reviewer for Machine Learning Journal.

10.1.4. Invited Talks

MARC TOMMASI was invited at the seminar of the machine learning group at the University of Liege.

JAN RAMON gave an invited talk at the TDLSG'17 workshop of ECML/PKDD'17.

AURÉLIEN BELLET gave invited talks at the DALI 2017 Workshop on Fairness and Privacy in Machine Learning,⁰ the 2nd Russian-French Workshop in Big Data and Applications,⁰ and the Journée Apprentissage et Interactions du GdR IA.⁰

AURÉLIEN BELLET gave an invited lecture at the Pre-doc Summer School on Learning Systems (MPI/ETH).⁰

AURÉLIEN BELLET was invited at the seminars of the Distributed Computing Lab at EPFL, Multispeech (Inria Nancy), Sequel (Inria Lille), SIGMA (Centrale Lille), Proba/Stat (University of Lille), CRISTAL Lille (DaTinG department day).

10.1.5. Scientific Expertise

MARC TOMMASI was member of the ANR CES 23 committee and served in the HCERES committee for the scientific evaluation of a French laboratory.

10.1.6. Research Administration

PASCAL DENIS was member of the Commission Emploi et Recherche (CER) and Commission de Développement Technologique (CDT) at the Inria Lille Research Center.

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

Licence MIASHS: MARC TOMMASI, Réseaux, 24h, L1, Université Lille 3.

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

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

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

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

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

Licence SHS: MIKAELA KELLER, Langages du Web, 24h, L2, Université Lille 3.

Licence SHS: MIKAELA KELLER, Représentation numérique de l'information, 24h, L2-L3, Université Lille 3.

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

Licence MARC TOMMASI C2i, Université Lille 3.

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

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

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

Master MIASHS: MIKAELA KELLER, Algorithmes fondamentaux de la fouille de données, 60h, M1, Université Lille 3.

Master MIASHS: MARC TOMMASI, Apprentissage et émergence de comportements, 30h, M2, Université Lille 3.

⁰<http://dalimeeting.org/dali2017/fairness-and-privacy.html>

⁰<https://bi.hse.ru/en/rfw/2017/>

⁰<http://www.gdria.fr/jai17/>

⁰<http://learning-systems.org/events/summer-school-on-learning-systems-2017>

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

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

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

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

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

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

E-learning

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

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

10.2.2. Supervision

Postdoc in progress: MELISSA AILEM, Inria@SiliconValley postdoctoral grant, supervised by AURÉLIEN BELLET, MARC TOMMASI, PASCAL DENIS and FEI SHA (University of Southern California).

Postdoc in progress: BO LI, ANR-NFS REM postdoctoral grant, supervised by PASCAL DENIS.

PhD in progress: ONKAR PANDIT, Graph-based Semi-supervised Linguistic Structure Prediction, since Dec. 2017, PASCAL DENIS, MARC TOMMASI and LIVA RALAIVOLA (University of Marseille).

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

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

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

PhD in progress: ROBIN VOGEL, Learning to rank by similarity and performance optimization in biometric identification, since 2017 (CIFRE thesis with IDEMIA and Télécom ParisTech).

PhD: PAULINE WAUQUIER, Task driven representation learning, Université de Lille, May 29th 2017, MIKAELA KELLER and MARC TOMMASI.

PhD: DAVID CHATEL, Semi-supervised spectral clustering defended, Dec. 7th 2017, MARC TOMMASI and PASCAL DENIS.

10.2.3. Juries

- AURÉLIEN BELLET was member of the PhD committee of ROMAIN BRAULT (Examinateur).
- MARC TOMMASI was member (head) of the recruitment committee for Professor and Assistant Professors in Computer Science at Université Lille 3.
- MARC TOMMASI was member of the habilitation committee of JESSE READ (Rapporteur).
- MIKAELA KELLER was a member of the recruitment committee for the Assistant Professor position in Computer Science at Université Lille 3.
- MIKAELA KELLER was a member of the PhD committee of DAMIEN FOURURE (Examinateuse).
- JAN RAMON was a member of the PhD committee of GIANNIS NIKOLENZOS (Athens, Greece).
- RÉMI GILLERON was a member of the PhD committee of LUDOVIC DOS SANTOS (Rapporteur).

10.3. Popularization

- AURÉLIEN BELLET participated in a discussion on Artificial Intelligence at the Fête de la Science event held at Cité des Sciences (Paris, October 8).
- JAN RAMON presented at the "Pint of Science" series in Lille on the theme of big data and data protection on May 15th.
- JAN RAMON gave a presentation on exploiting traffic data (and the MAGNET work in the MUST project in this domain) in the Inria Meet-up series on December 14th.

MINT2 Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific Events Selection

9.1.1.1. Member of the Conference Program Committees

Laurent Grisoni : PC for VISIGRAPP (IEEE InfoViz Art Track), Computer Graphics International (CGI, computer graphics), MOCO (international workshop on gesture), ISEA (art-science), GRAPP (computer graphics)

9.1.1.2. Reviewer

Florent Berthaut: Reviewer for ACM CHI Conference and NIME conference

Laurent Grisoni: Eurohaptics, ACM UIST, ACM CHI

9.1.2. Journal

9.1.2.1. Member of the Editorial Boards

Frédéric Giraud is Associate Editor of IEEE Transactions on Haptics

9.1.2.2. Reviewer - Reviewing Activities

Florent Berthaut: Reviewer for IEEE Multimedia

Laurent Grisoni: Computer & Graphics

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- Licence: Florent Berthaut, Spreadsheets et VBA programming, LEA L3 TCI (22h), Web programming, LEA L3, Université Lille 3, France
- Licence: Frédéric Giraud, Physique pour le génie électrique (30h), Université Lille 1
- Master: Christophe Giraud-Audine, Control of electrical machines (30h), Power Electronics (30h), signal processing (30h), niveau M1, ENSAM, France
- Master: Florent Berthaut, Web programming, LEA M1 TSM (16,5h) and LEA M1 RICI (48h), Database, LEA M1 ANI (22h), Université Lille 3, France
- Master: Frédéric Giraud, Control of electrical machines (30h), Power Electronics (40h) niveau M1, Université Lille1, France
- Master: Laurent Grisoni, NIHM : nouvelles Interactions Homme-Machine, (6h), niveau M2, Université Lille 1, France
- Master: Laurent Grisoni, Représentation et compression de données (24h), introduction à la programmation (38h), cryptographie (8h), Ecole Polytech'lille (dept IMA)
- Master: Laurent Grisoni: Gestion de projet en Co-design interdisciplinaire, Master Sciences et Culture du Visuel, Université de Lille Sciences Humaines et Sociales, Master Sciences et Cultures du Visuel (12h)
- Master: Laurent Grisoni, IHM et interface à gestes, (24h), niveau M2 (IMA5), Polytech Lille, France

9.2.2. Supervision

- PhD in progress: Ehsan Enferad, Modélisation et commande d'une interface tactile à stimulation hybride par modulation de friction et retournement temporel, Nov. 2015, F. Giraud, C. Giraud-Audine
- PhD in progress: Cagan Arslan, Fusion de données pour l'interaction homme-machine, Oct. 2015, L. Grisoni/J. Martinet
- PhD in progress: Farzan Kalantari, Interaction sur dispositif à retour tactile et kinesthésique, Oct. 2014, L. Grisoni, F. Giraud
- PhD: Hanae Rateau, Exploring Interative Sub-Spaces for Gestural Midair Interaction, Université de Lille Sciences et Technologies, 17 May 2017, L. Grisoni
- PhD in progress: Vincent Gouezou: L'architecte et ses outils, au travers de l'histoire et dans sa relation actuelle au numérique, Oct. 2014, L. Grisoni 25% (with F. Vermandel, architect, Lille School of Architecture)
- PhD in progress: Charlotte Planckeel, Le sens de la lacunae en archéologie de l'âge du bronze, archéologie et outils numériques, L. Grisoni (25%, with A. Lehoerff, Lille 3, archeologist)
- PhD in progress: Olivier Capra, Interaction de présentation, Oct. 2016, L. Grisoni, F. Berthaut

Mjolnir Team

10. Dissemination

10.1. Promoting Scientific Activities

10.1.1. Scientific Events Organisation

10.1.1.1. General Chair, Scientific Chair

- **ICMI** (ACM): Edward Lank (General co-Chair)
- **Rencontres Jeunes Chercheurs** (AFIHM): Sylvain Malacria (co-Chair)
RJCs is a biyearly summer school organized by the French-speaking HCI association with courses and seminars targeting 1st and 2nd year PhD students (about 20 participants).

10.1.1.2. Member of the Organizing Committees

- **VIS** (IEEE): Fanny Chevalier (Meetups co-Chair)

10.1.2. Scientific Events Selection

10.1.2.1. Member of the Conference Program Committees

- **ICMI** (ACM): Thomas Pietrzak
- **Infovis** (IEEE): Fanny Chevalier, Sylvain Malacria
- **CHI** (ACM): Fanny Chevalier (sub-committee co-chair), Sylvain Malacria (associate chair), Mathieu Nancel (associate chair)
- **IHM** (AFIHM): Géry Casiez

10.1.2.2. Reviewer

- **CHI** (ACM): Géry Casiez, Thomas Pietrzak
- **UIST** (ACM): Géry Casiez, Fanny Chevalier, Thomas Pietrzak, Sylvain Malacria, Mathieu Nancel
- **MobileHCI** (ACM): Sylvain Malacria
- **ICMI** (ACM): Christian Frisson, Mathieu Nancel
- **ISS** (ACM): Mathieu Nancel
- **DIS** (ACM): Mathieu Nancel
- **Interact** (IFIP): Géry Casiez, Fanny Chevalier, Stéphane Huot, Sylvain Malacria
- **World Haptics** (IEEE): Thomas Pietrzak
- **Eurovis** (IEEE): Fanny Chevalier
- **IHM** (AFIHM): Christian Frisson
- **DAFx**: Christian Frisson
- **OzCHI**: Amira Chalbi

10.1.3. Journal

10.1.3.1. Member of the Editorial Boards

- **Computer Music Journal Editorial Advisory Board**: Marcelo Wanderley

10.1.3.2. Reviewer - Reviewing Activities

- **Intl. Journal of Human-Computer Studies** (Elsevier): Thomas Pietrzak
- **Transactions on Visualization and Computer Graphics** (IEEE): Fanny Chevalier
- **Transactions on Computer-Human Interaction** (ACM): Fanny Chevalier

- [Intl. Journal of Human–Computer Interaction](#) (Taylor & Francis): Thomas Pietrzak

10.1.4. Invited Talks

- [Left Brain, Right Brain: Designing Interaction for Visual Analytics and Creativity, Segal Seminar Series](#), Northwestern University: Fanny Chevalier
- [Designing Interaction for Visual Analytics and Creativity](#), giCenter, City University of London: Fanny Chevalier
- [Direct Spacetime Sketching and Editing of Visual Media](#), University College London: Fanny Chevalier
- [Static and Dynamic Network Visualization](#), Université Catholique de Lille: Fanny Chevalier
- [Concevoir des systèmes interactifs pour tous](#), European Commission in Luxembourg: Thomas Pietrzak
- [Advanced Interaction Techniques to Favor the Transition from Novice to Expert Behavior, International Symposium on User Expertise and Interactive Systems \(UEIS\)](#): Sylvain Malacria

10.1.5. Leadership within the Scientific Community

[Association Francophone d'Interaction Homme-Machine \(AFIHM\)](#):

- Géry Casiez: president until Sept. 2017
- Stéphane Huot: board member until Sept. 2017, scientific council member
- Thomas Pietrzak: board member, webmaster

10.1.6. Scientific Expertise

- [Natural Sciences and Engineering Research Council \(NSERC\) Discovery grants](#): Géry Casiez (reviewer), Fanny Chevalier (reviewer)
- CN35 AFNOR normalization committee about normalizing the French keyboard, in collaboration with Aalto University and the Max Planck Institute: Mathieu Nancel
- Research Foundation - Flanders (FWO), evaluate doctoral fellowships strategic basic research applications: Mathieu Nancel

10.1.7. Research Administration

For Inria:

- [Evaluation committee](#): Nicolas Roussel (member until July 2017)
- Gender equity and equality committee: Nicolas Roussel (member)
- Strategic orientation committee for the information system (COSS scientifique): Nicolas Roussel (member)
- International relations working group (COST-GTRI): Stéphane Huot (member)

For Inria Lille – Nord Europe:

- Scientific officer (délégué scientifique): Nicolas Roussel (until July 2017)
- “Bureau du comité des équipes projets” (BCEP): Stéphane Huot (member since Sept. 2017)
- Research jobs committee (CER): Fanny Chevalier (member), Nicolas Roussel (member until July 2017)
- Technical development committee (CDT): Nicolas Roussel (member until July 2017)
- Consultative committee (Comité de centre): Fanny Chevalier (member)
- Operational legal and ethical risk assessment committee (COERLE): Stéphane Huot (local correspondent)
- Support to researchers (accompagnement des chercheurs): Stéphane Huot (adviser)
- Activity reports (RAweb): Nicolas Roussel (local correspondent until July 2017)

For the CRISTAL lab of Univ. Lille 1 & CNRS:

- Laboratory council: Géry Casiez (elected member)
- Computer Science PhD recruiting committee: Géry Casiez (member)

For the Univ. Lille 1:

- Coordinator for internships at IUT A: Géry Casiez

10.1.8. Hiring committees

- Inria's eligibility jury for Junior Researcher Positions (CR2) in Lille: Stéphane Huot (president)
- University of Lille hiring committee for two Computer Science Assistant Professor positions: Thomas Pietrzak (vice-president)
- University of Nice Sophia Antipolis hiring committee for a Computer Science Full Professor position: Stéphane Huot (member)
- Université Paris-Saclay hiring committee for a Computer Science Assistant Professor position: Géry Casiez (member) and Fanny Chevalier (member)

10.2. Teaching - Supervision - Juries

10.2.1. Teaching

DUT Informatique: Géry Casiez (72h), Stéphane Huot (28h), *IHM*, 1st year, IUT A de Lille - Univ. Lille 1

DUT Informatique: Géry Casiez, *Algorithmique*, 80 h, 1st year, IUT A de Lille - Univ. Lille 1

DUT Informatique: Géry Casiez, *Modélisation mathématique*, 14 h, 2nd year, IUT A de Lille - Univ. Lille 1

DUT Informatique: Géry Casiez, *Projets*, 18 h, 2nd year, IUT A de Lille - Univ. Lille 1

Licence Informatique: Thomas Pietrzak, *Logique*, 52.5h, L3, Univ. Lille 1

Licence Informatique: Thomas Pietrzak, *Automates et Langages*, 36h, L3, Univ. Lille 1

Licence Sciences pour l'Ingénieur (SPI): Sylvain Malacria, *Introduction à l'Interaction Homme Machine*, 30h, L3, Institut Villebon Georges Charpak

Master Informatique: Thomas Pietrzak (18h), Géry Casiez (11h), Fanny Chevalier (13.5h), *NIHM*, M2, Univ. Lille 1

Master Informatique: Géry Casiez, *RVI*, 4 h, M2, Univ. Lille 1

Master Informatique: Géry Casiez, *Multi-Touch Interaction*, 10 h, M1, Univ. Lille 1

Master Informatique: Géry Casiez (4h), Thomas Pietrzak (4h), *Projets*, M2, Univ. Lille 1

Master Informatique: Thomas Pietrzak (55.5h), Sylvain Malacria (31.5), Nicolas Roussel (6h), *IHM*, M1, Univ. Lille 1

Master Informatique: Mathieu Nancel, *Information Visualization*, 9h, M2, Univ. Lille 3

Master: Géry Casiez (6h), Thomas Pietrzak (10.5h), *3DETech : 3D Digital Entertainment Technologies*, M2, IMT Lille Douai

Master: Thomas Pietrzak, *IHM et interfaces à gestes*, 12h, M2, Polytech Lille

Master Sciences Humaines et Sociales – Réseaux Sociaux Numériques (RSN): Fanny Chevalier, *Statistiques et visualisation de données*, 8h, M2, Univ. Lille 1

Master Sciences Humaines et Sociales – Réseaux Sociaux Numériques (RSN): Fanny Chevalier, *Outils et pratiques numériques*, 6h, M1, Univ. Lille 1

Doctorat: Géry Casiez, *Workshop on statistics for HCI*, AFIHM RJC IHM 2017

10.2.2. Supervision

PhD: Justin Mathew, *A Design Framework for User Interfaces of 3D Audio Production Tools*, defended in Oct. 2017 [11], advised by Stéphane Huot & Brian Katz

PhD in progress: Axel Antoine, *Helping Users with Interactive Strategies*, started Oct. 2017, advised by Géry Casiez & Sylvain Malacria

PhD in progress: Nicole Ke Chen Pong, *Understanding and Improving Users Interactive Vocabulary*, started Oct. 2016, advised by Nicolas Roussel, Sylvain Malacria & Stéphane Huot

PhD in progress: Thibault Raffaillac, *Languages and System Infrastructure for Interaction*, started Oct. 2015, advised by Stéphane Huot & Stéphane Ducasse

PhD in progress: Amira Chalbi-Neffati, *Understanding and Designing Animations in the User Interfaces*, started Oct. 2014, advised by Nicolas Roussel & Fanny Chevalier

PhD in progress: Hakim Si Mohammed, *Improving Interaction Based on a Brain-Computer Interface*, started Oct. 2016, advised by Anatole Lecuyer, Ferran Argelaguet, Géry Casiez & Nicolas Roussel (in Rennes)

PhD in progress: Hrim Mehta, *Data Narratives*, started Oct. 2016, advised by Christopher Collins & Fanny Chevalier (at University of Ontario)

PhD in progress: Nicole Barbosa Sultanum, *Visualization of Medical Narratives*, started Sept. 2015, advised by Michael Brudno, Daniel Wigdor & Fanny Chevalier (at University of Toronto)

PhD in progress: Alexandre Kouyoumdjian, *Multimodal Selection of Numerous Moving Targets in Large Visualization Platforms: Application to Interactive Molecular Simulation*, started Oct. 2013, advised by Stéphane Huot, Patrick Bourdot & Nicolas Ferey (in Saclay)

PhD in progress: Jeronimo Barbosa, *Design and Evaluation of Digital Musical Instruments*, McGill University, started in 2013, advised by Marcelo Wanderley & Stéphane Huot (in Montréal)

10.2.3. Juries

Caroline Appert (HDR, Univ. Paris-Saclay): Géry Casiez, examiner

Jessalyn Alvina (PhD, Univ. Paris-Saclay): Géry Casiez, examiner

Élie Cattan (PhD, Univ. Grenoble Alpes): Géry Casiez, reviewer

Martin Cronel (PhD, Univ. de Toulouse): Géry Casiez, examiner

Onur Ferhat (PhD, Univ. Autònoma de Barcelona): Christian Frisson, examiner

Maxime Guillon (PhD, Univ. Grenoble Alpes): Géry Casiez, reviewer

Rafael Morales González (PhD, Univ. Paris-Saclay): Stéphane Huot, examiner

10.2.4. Mid-term evaluation committees

- Olivier Capra (PhD, Univ. Lille 1): Stéphane Huot
- Bruno Fruchard (PhD, Univ. Paris-Saclay): Géry Casiez
- Sarah Ribet (PhD, Univ. Lille 1): Géry Casiez
- Hugo Romat (PhD, Univ. Paris-Saclay): Fanny Chevalier

10.3. Popularization

Dashboard software in the **Sbarro** car: **Mojave at the Geneva Motor Show 2017** in Geneva, Julien Decaudin, Christian Frisson, Thomas Pietrzak.

Projet Happiness : ça roule pour le tactile, interview in the **Inria official website**, Thomas Pietrzak, Christian Frisson, Julien Decaudin.

Dans la peau d'un robot, article in **le blog binaire** and in the **Inria official website**, Amira Chalbi.

Banned From the US? There's a Robot for That, interview in **WIRED**, Amira Chalbi.

Mon Histoire avec l'Informatique, presentation at “L codent L créent”: Amira Chalbi, Nicole Pong.