



RESEARCH CENTER
Grenoble - Rhône-Alpes

FIELD

Activity Report 2012

Section Dissemination

Edition: 2013-04-24

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ARIC Team

9. Dissemination

9.1. Scientific Animation

- Florent de Dinechin was in the program committee of HEART 2012 (Highly Efficient Accelerators for Reconfigurable Computing), FPL 2012 (Field-Programmable Logic), FPT 2012 (Field-Programmable Technologies) and ARC 2012 (Applied Reconfigurable Computing), and on the steering committee of the french Symposium on Architectures.
- Guillaume Hanrot was in the hiring committees for professors at the universities of Caen, Toulon, and UCB Lyon 1. He is a member of the scientific council of ENSIIE (Évry).
- Claude-Pierre Jeannerod, Nicolas Louvet, Nathalie Revol, Dave Saunders (University of Delaware, U.S.A.), Philippe Théveny and Gilles Villard organized the LyonBox meeting that gathered members of the LinBox project (ENS de Lyon, July 19-21).
- Claude-Pierre Jeannerod was in the software exhibits committee of ISSAC 2012. He is also a member of the scientific committee of “Journées Nationales de Calcul Formel”.
- Fabien Laguillaumie was in the program committee of ACISP 2012 (17th Australasian Conference on Information Security and Privacy).
- Jean-Michel Muller chaired the Aeres visiting committees of laboratories LIAFA and PPS. He was in the program committee of ARITH’21 (21st IEEE Symposium on Computer Arithmetic) and ASAP’2012 (Application-Specific Systems, Architectures and Processors). He is a member of the scientific councils of École Normale Supérieure de Lyon and Cerfacs.
- Nathalie Revol is a member of the steering and scientific committees of SCAN 2012, Novosibirsk. She organized a session on interval arithmetic at RAIM 2012, Dijon. She is a member of the “comité de diffusion” of the MILyon labex, one of her tasks was the selection of participants to ISSMYS 2012, Lyon. She is a member of the selecting committee of CapMaths. She is a member of the CES (Commission des Emplois Scientifiques), the hiring committee for postdocs at Inria Grenoble - Rhône-Alpes.
- Bruno Salvy is a member of the editorial boards of the Journal of Symbolic Computation and of the Journal of Algebra (section Computational Algebra), as well as the Springer series “Texts and Monographs in Symbolic Computation” and the series “Mathématiques & Applications” of the French SMAI. He is organizing the working group Computer Algebra of the CNRS GDR IM (Mathematical Computer Science). This year, he is a member of the program committee of AofA 2012 (Analysis of Algorithms), Montreal, Analco13 (Analytic Algorithmics and Combinatorics), New Orleans and ISSAC 2013 (Symbolic and Algebraic Computation), Boston. He has also been a member of several committees: PES at Inria; hiring junior researchers (CR) at Inria; hiring professors in Caen and Grenoble; visiting committee of the laboratory Liafa (Paris 7) for the Aeres.
- Damien Stehlé was in the program committees of INDOCRYPT’12, CRYPTO’12 and ISSAC’12. He was in the hiring committees for lecturers at the universities of Grenoble and Montpellier. He is a member of the steering committee of the Cryptography and Coding working group of GDR IM.
- Gilles Villard is chair of LIP laboratory.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence : Introduction to computer science, 24h, L1, ENS Lyon / classe passerelle pour l’enseignement supérieur, taught by Guillaume Hanrot (autumn 2012)

Licence : Introduction to Functional Programming, 30h, L1, UCB Lyon 1, taught by Nicolas Louvet (autumn 2012);

Licence : Computer Architecture, 74h, L2, UCB Lyon 1, taught by Nicolas Louvet (spring 2012);

Licence : Algorithms and Data Structures, 30h, L3, UCB Lyon 1, taught by Nicolas Louvet (autumn 2012);

Licence : Operating Systems, 60h, L3, UCB Lyon 1, taught by Nicolas Louvet (spring and autumn 2012);

Licence : “Groupe de lecture” Error-Correcting Codes, 24h, L3, ENS Lyon, taught by Nicolas Brisebarre, Eleonora Guerrini, Guillaume Hanrot and Damien Stehlé (spring 2012);

Master: Numerical Algorithms, M2, UCB Lyon 1, 20h taught by Claude-Pierre Jeannerod and 16h taught by Nicolas Louvet in a 36h course (spring 2012);

Master: Formal Proofs of Floating-Point Algorithms, ENS Lyon, 10h taught by Jean-Michel Muller in a 24h course (autumn 2012);

Master: Computer Arithmetic, 30h, M2, UCB Lyon 1, taught by Vincent Lefèvre (autumn 2012);

Master: Approximations: from symbolic to numerical computation, and applications, ENS Lyon, 12h taught by Nicolas Brisebarre and 12h taught by Bruno Salvy in a 24h course (autumn 2012);

Master: Computer Algebra, 24h, M1, ENS Lyon, taught by Guillaume Hanrot and Claude-Pierre Jeannerod (spring 2012);

Introduction to informatics for high school teachers, part of which (16h) was taught by Guillaume Hanrot (spring 2012).

9.2.2. Supervision

PhD & HdR :

PhD: Jingyan Jourdan-Lu, *Custom floating-point arithmetic for integer processors: algorithms, implementation, and selection* [11], ENS de Lyon - Université de Lyon, defended on November 15, 2012. Supervisors: Claude-Pierre Jeannerod, Christophe Monat (STMicroelectronics Compilation Expertise Center, Grenoble), and Jean-Michel Muller.

PhD: Érik Martin-Dorel, *Contributions à la vérification formelle d’algorithmes arithmétiques* [12], ENS de Lyon - Université de Lyon, defended on September 26, 2012. Supervisors: Micaela Mayero and Jean-Michel Muller.

PhD: Adrien Panhaleux, *Contributions à l’arithmétique flottante : codage et arrondi correct de fonctions algébriques* [13], ENS de Lyon - Université de Lyon, defended on June 27, 2012. Supervisors: Nicolas Louvet and Jean-Michel Muller.

PhD in progress : Nicolas Brunie, *Architecture et réalisation d’un accélérateur reconfigurable à couplage fort pour processeurs parallèles*, begun in September 2010 (CIFRE from April 2011), Florent de Dinechin, Renaud Ayrignac (Kalray).

PhD in progress : Julien Devigne, *Chiffrement pour la protection de la vie privée*, begun in September 2011 (Orange Labs - University of Caen), co-supervised by F. Laguillaumie (together with Sébastien Canard and Brigitte Vallée)

PhD in progress: Adeline Langlois, *Foundations of lattice-based cryptography*, begun in September 2010, supervised by D. Stehlé

PhD in progress: Philippe Théveny, *Numerical quality and high performance in scientific computing on emerging architectures*, begun in September 2011, supervised by N. Revol

PhD in progress : Serge Torres, *Some tools for the design of efficient and reliable function evaluation libraries*, started in September 2010, Supervisors: Nicolas Brisebarre and Jean-Michel Muller.

9.2.3. Juries

- Nicolas Brisebarre was a member of the board of examiners for the PhD defense of A. Benoit (École Polytechnique, 2012-07-18).
- Florent de Dinechin was a referee for the PhD of Naeem Abbas (Université Rennes-1, 2012-05-22).
- Guillaume Hanrot chaired the board of examiners for the PhD defense of P. Lezowski (Univ. Bordeaux 1, 2012-12-01).
- Claude-Pierre Jeannerod was in the PhD committee of J. Jourdan-Lu (ENS de Lyon, 2012-11-15).
- Fabien Laguillaumie was in the PhD committees of Kaoutar Elkhyaoui (EURECOM, 2012-09-12) and Olivier Blazy (ENS de Paris, 2012-09-27) as a referee and of Roch Lescuyer (Orange Labs/ENS de Paris, 2012-11-21).
- Jean-Michel Muller chaired the boards of examiners for the PhD defenses of T.M.T. Nguyen (Univ. Paris Sud, 2012-06-11) and R. Lebreton (École Polytechnique, 2012-12-11), and was a member of the boards of examiners for the PhD defenses of E. Martin-Dorel (ENS Lyon, 2012-09-26), A. Panhaleux (ENS Lyon, 2012-06-27), and J. Jourdan-Lu (ENS Lyon, 2012-11-15), and for the Habilitation defenses of M. Mayero (Univ. Paris Nord, 2012-11-22) and E. Thomé (Univ. Nancy, 2012-12-13).
- Bruno Salvy has been a member of the PhD committees of P.-J. Spaenlauber (Paris 6, 2012-10-09), O. Roussel (Paris 6, 2012-09-25) and of the committee for the habilitation of E. Thomé (Nancy, 2012-12-13), for which he was a referee.
- Damien Stehlé was in the PhD juries of P. Lezowski (Université Bordeaux 1, 2012-12-01) and G. Quintin (Ecole Polytechnique, 2012-11-22), for which he was a referee.

9.3. Invited Conferences

- Florent de Dinechin gave invited lectures at CERFACS (Toulouse), at the CERN/Intel OpenLab workshop at CERN and at CASPUR (Rome). He gave talks at Altera (High Wycombe, UK) and Maxeler Technologies (London).
- Jean-Michel Muller gave invited talks in satellite workshop of the SIAM'2012 Conference on Applied Linear Algebra (Valencia, Spain, June 2012), in the Workshop on Numerical Software (Santander, Spain, July 2012), and the LMS Colloquium "Verification and Numerical Algorithms" (London, November 2012).
- Nathalie Revol gave invited talks at national meetings: "Précision numérique" at CNES (Toulouse, January 2012), "Précision et incertitudes" organized by the thematic groups GAMNI and MAIRCI of the SMAI (Paris, February 2012), and at international meetings: "IFIP Working Group 2.5 on Numerical Software" and "Numerical software: design, analysis and verification" (both at Santander, Spain, July 2012).
- Damien Stehlé gave an invited talk at the workshop on Mathematical and Statistical Aspects of Cryptography (Kolkata, India, January 2012), lectures at International Workshop on Recent Advances in Lattice Reduction Algorithms and their Applications (Hyderabad, India, April 2012), an invited talk at Journées Charles Hermite (Nancy, France, June 2012), a plenary invited talk at the international conference SCC 2012 (Castro Urdiales, Spain, July 2012), lectures at Ecrypt Summer School on Lattices (Porto, Portugal, October 2012), an invited talk at the workshop on Post-Quantum Cryptography and Quantum Algorithms (Leiden, Netherlands, November 2012) and an invited talk at Colloquium Jacques Morgenstern (Sophia-Antipolis, December 2012).

9.4. Popularization

- Nathalie Revol gives talks for pupils at collèges and lycées, as an incentive to choose scientific careers: lycée Chabrillan (Montélimar, Drôme), collège Jacques Cœur (Lentilly, Rhône). She gave two talks around Women's Day, one at collège Pierre Moreto (Thuir, Pyrénées-Orientales) and one for a general audience, invited by the city of Canohes (Pyrénées-Orientales). The French Ministry of Education launched the first week of mathematics: N. Revol took part in the preparation of a television report for France 2 and she gave two 2-hours talks at lycées Pierre Brossolette (Villeurbanne) and Juliette Récamier (Lyon). For the Science Fair, she gave two talks at ENS Lyon.

COMPSYS Project-Team

9. Dissemination

9.1. Scientific Animation

Christophe Alias is a member of the steering committee of IMPACT (international workshop on polyhedral compilation techniques). Christophe Alias, Alain Darte, and Paul Feautrier were members of the program committee of IMPACT'13, which will be held in conjunction with HiPEAC'13.

Laure Gonnord and Fabrice Rastello are the co-animators of the french compilation community, and organized the fifth session in June 2012, in Rennes.

Paul Feautrier is an associate editor of *International Journal of Parallel Programming* and of *Parallel Computing*. Alain Darte is an associate editor of ACM Transactions on Embedded Computing Systems.

Laure Gonnord was a member of the program committee of TAPAS'12 (Tools for Automatic Program Analysis).

In addition to IMPACT'13, Paul Feautrier is a member of the program committee of ParCo'13 (International Parallel Computing Conference). He has reviewed papers for LCTES, DATE and ACM TECS.

In addition to IMPACT'13, Alain Darte was a member of the program committees of DATE'13 (Design, Automation, and Test in Europe), LCTES'12 (Languages, Compilers, Tools, and Theory for Embedded Systems), IPDPS'13 (International Parallel and Distributed Processing Symposium). He has reviewed papers for the DATE'13, LCTES'12, EMSOFT'12, CGO'13 conferences and for the following journals: TSI, Parallel Computing, ACM TECS.

9.2. Workshops and Invited Talks

Alain Darte and Quentin Colombet participated to the 3-days workshop CPC'12 (16th Workshop on Compilers for Parallel Computing), in Padova, Italy, January 11-13, 2012. giving two talks "Kernel offloading with optimized remote accesses" and "Spilling in the light of SSA".

Alain Darte was invited by Jürgen Teich (University of Erlangen-Nuremberg) to give a talk (May 18, 2012) on "Optimizing remote accesses for offloaded kernels, with application to HLS for FPGA", as part of their "invasive computing" project.

Alain Darte was invited to participate to the 4-days workshop ScalPerf'12 (Scalable Approaches to High Performance and High Productivity Computing), in Bertinoro, Italy, September 23-27, 2012. He gave a talk on "Parametric tiling with pipelining or how to automate double-buffering execution style".

9.3. Teaching - Supervision - Juries

9.3.1. Teaching

Licence: Christophe Alias gave a L3 course on "Introduction to compilation" at ENSI Bourges and a L2 lab on "Architecture des ordinateurs" at Université Lyon 1. Laure Gonnord has a full teaching activity in Polytech'Lille where she teaches algorithmics, compilation, and basics of hardware.

Master 1: Christophe Alias gave a Master 1 course on "Compilation" at ENS-Lyon.

Master 2: Alain Darte gave a full Master 2 course on "Advanced compilation and program optimizations" at ENS-Lyon.

Master 1 and 2: Christophe Alias is organizer of the Winter Master School “Vérification et certification du logiciel” that was held in January 2012 at ENS-Lyon, as part of the Master of ENS-Lyon.

Internships: Laure Gonnord and Christophe Alias co-supervised the undergraduate internship of Jean-Marie Vincenti, from the Engineering School Polytech’Lille. This internship lasted two months, from June 2012 to July 2012. The topic was about graphical visualization and step-by-step debugging of communicating processes described with an execution trace. Alain Darté advised the M2 internship of Alexandre Isoard on the parametric tiled kernel offloading (see Section 6.5).

9.3.2. Supervision

PhD in progress: Guillaume Iooss, “Semantic program transformations in the polyhedral model”, started in September 2011, at ENS-Lyon and Colorado State University. Advisors: Christophe Alias, Alain Darté, Sanjay Rajopadhye (Colorado State University).

PhD in progress: Alexandre Isoard, “Optimization of remote communications”, started in September 2012, at ENS-Lyon. Advisors: Christophe Alias, Alain Darté.

PhD: Quentin Colombet, “Decoupled (SSA-based) Register Allocators: from Theory to Practice, Coping with Just-In-Time Compilation and Embedded Processors Constraints” [1], ENS-Lyon, December 7, 2012. Advisors: Alain Darté, Fabrice Rastello.

HdR: Fabrice Rastello, “On Sparse Intermediate Representations: Some Structural Properties and Applications to Just In Time Compilation” [2], ENS-Lyon, December 7, 2012.

9.3.3. Juries

Fabrice Rastello was member of the jury for Artur Pietrek’s PhD thesis (Verimag, Université Joseph Fourier), defended December 2, 2012.

Paul Feautrier is one of the referees for Stéphane Mancini’s HdR (TIMA, Grenoble), to be defended February 19, 2013.

Alain Darté was reviewer of Mehdi Amini’s PhD thesis (Ecole nationale supérieure des Mines de Paris), defended December 13, 2012, and entitled “Source-to-Source Automatic Program Transformations for GPU-like Hardware Accelerators”.

As co-advisors, Alain Darté and Fabrice Rastello were of course part of the jury of Quentin Colombet’s PhD thesis [1], defended December 7, 2012, at ENS-Lyon, and entitled “Decoupled (SSA-based) Register Allocators: From Theory to Practice, Coping with Just-In-Time Compilation and Embedded Processors Constraints”.

Alain Darté was part of the jury of Fabrice Rastello’s HdR thesis [2], defended December 7, 2012, at ENS-Lyon, and entitled “On Sparse Intermediate Representations: Some Structural Properties and Applications to Just-In-Time Compilation”.

CONVECS Team

9. Dissemination

9.1. Scientific Animation

9.1.1. Software Dissemination and Internet Visibility

The CONVECS team distributes several software tools: the CADP toolbox (see 5.1), the TRAIAN compiler (see 5.2), and the PIC2LNT translator (see 5.3). In 2012, the main facts are the following:

- We prepared and distributed 11 successive beta-versions (from 2010-h to 2010-m, from 2011-a to 2011-c, and from 2012-a to 2012-b “Zurich”) of CADP.
- We were requested to grant CADP licenses for 1227 different computers in the world.
- We released version 2.7 of the TRAIAN compiler for LOTOS NT in November 2012.
- We released version 2.0 of the PIC2LNT translator from an applied π -calculus to LNT in October 2012.

We constructed the CONVECS Web site (see <http://convecs.inria.fr>) and we updated it with scientific contents, announcements, publications, etc.

By the end of December 2012, the CADP forum (see <http://cadp.inria.fr/forum.html>), opened in 2007 for discussions regarding the CADP toolbox, had over 230 registered users and over 1400 messages had been exchanged.

Other research teams took advantage of the software components provided by CADP (e.g., the BCG and OPEN/CAESAR environments) to build their own research software. We can mention the following developments:

- Formal modeling and verification of BPEL-based Web service composition [62],
- A specific-domain design tool for FPGA-based image and video processing system [63],
- Quantitative timed analysis of interactive Markov chains [49],
- Synchronizability for verification of asynchronously communicating systems [31],
- Deciding choreography realizability [30],
- Automata learning through counterexample guided abstraction refinement [26],
- The Reo+mCRL2 framework for model-checking dataflow in service compositions [52],
- The IDCM analysis tool for components and architectures dedicated to incremental construction [54],
- Rigorous development of composite grid services [60],
- Integrating model-based testing and analysis tools via test case exchange [28], and
- The DFTCalc tool for calculating the failure probability of a dynamic fault tree (DFT) using LNT [61].

Other teams also used the CADP toolbox for various case studies:

- Learning and testing the bounded retransmission protocol [27],
- Specification and validation of a real-time simple parallel kernel for dependable distributed systems [40],
- Abstraction-based malware analysis using rewriting and model checking [32], and
- Model checking of scenario-aware dataflow [58].

9.1.2. Program Committees

In 2012, the members of CONVECS took on the following responsibilities:

- H. Garavel is an editorial board member of STTT (Springer International Journal on Software Tools for Technology Transfer).
- F. Lang was a program committee member for NEPTUNE'2012 (Nice Environment with a Process and Tools Using Norms and Example), Paris, France, June 6-7, 2012.
- F. Lang was a program committee member for ESOC'2012 (European Conference on Service-Oriented and Cloud Computing), Bertinoro, Italy, September 19-21, 2012.
- F. Lang and G. Salaün were program committee members for FMICS'2012 (17th International Workshop on Formal Methods for Industrial Critical Systems), Paris, France, August 27-28, 2012.
- R. Mateescu was a program committee member for GRAPHITE'2012 (1st International Workshop on Graph Inspection and Traversal Engineering), Tallinn, Estonia, March 31 - April 1st, 2012.
- R. Mateescu was a program committee member for TASE'2012 (6th International Symposium on Theoretical Aspects of Software Engineering), Beijing, China, July 4-6, 2012.
- G. Salaün is an editorial board member of SOCA (Springer International Journal on Service Oriented Computing and Applications).
- G. Salaün was a program committee member for COORDINATION'2012 (14th International Conference on Coordination Models and Languages), Stockholm, Sweden, June 14-15, 2012.
- G. Salaün was a program committee chair for FACS'2012 (9th International Symposium on Formal Aspects of Component Software), Mountain View, USA, September 12-14, 2012.
- G. Salaün was a program committee member for FLACOS'2012 (6th International Workshop on Formal Languages and Analysis of Contract-Oriented Software), Bertinoro, Italy, September 19, 2012.
- G. Salaün was a steering committee member for FOCLASA'2012 (11th International Workshop on Foundations of Coordination Languages and Self-adaptation), Newcastle upon Tyne, UK, September 8, 2012.
- W. Serwe was a program committee member for PDMC'2012 (11th International Workshop on Parallel and Distributed Methods in Verification), Imperial College, London, UK, September 17, 2012.

9.1.3. Awards and Distinctions

- H. Garavel is an invited professor at the University of Saarland (Germany) after he received the Gay-Lussac Humboldt Prize in 2011.
- M. Güdemann received the Software Engineering Award of the Ernst Denert Association in 2012.

9.1.4. Lectures and Invited Conferences

- H. Garavel gave a keynote lecture entitled “*Three Decades of Success Stories in Formal Methods*” at FMICS'2012 (Paris, France) on August 28, 2012.
- H. Garavel gave a lecture entitled “*Trois décennies de réussite en méthodes formelles*” in the Aerospace Valley industrial conference on formal methods (Toulouse, France) on November 13, 2012.
- M. Güdemann visited the Institute for Systems and Systems Engineering (ISSE) at the University of Augsburg (Germany) on March 1st, 2012. He gave a tutorial on CADP.
- F. Lang and W. Serwe presented a tutorial on CADP at AFADL'2012 (Grenoble, France) on January 12, 2012.
- R. Mateescu visited the LRI laboratory (University Paris-Sud at Evry) on March 21–22, 2012. He gave a talk entitled “*Extending Temporal Logics in Practice: Model Checking and Applications*” on March 22, 2012.

- R. Mateescu presented a tutorial on CADP at FM'2012 (Paris, France) on August 28, 2012.
- R. Mateescu gave a talk entitled “*Querying Graphs On-the-Fly using a Model Checking Language*” at the LIG laboratory (Grenoble) on September 27, 2012.
- G. Salaün visited the LRI laboratory (University Paris-Sud at Evry) on March 19, 2012. He gave a talk entitled “*Specifying and Verifying a Self-Configuration Protocol for Distributed Applications in the Cloud using LNT and CADP*” on March 19, 2012.
- G. Salaün visited the LINA laboratory (University of Nantes) on March 22–23, 2012. He gave a talk entitled “*Specifying and Verifying a Self-configuration Protocol for Distributed Applications in the Cloud using LNT and CADP*” on March 22, 2012.
- G. Salaün visited the FBK laboratory (Trento, Italy) on March 28, 2012. He gave a talk entitled “*Design and Verification of Distributed Systems*” on March 28, 2012.
- G. Salaün visited the IRIT laboratory (Toulouse) on November 19–21, 2012. He gave a talk entitled “*Design and Verification of Communicating Systems*” on November 19, 2012.
- W. Serwe participated to the kick-off meeting of the Sensation project, held on November 1–2, 2012 in Aalborg (Denmark). He gave a talk entitled “*Model Checking and Performance Evaluation with CADP Illustrated on Shared-Memory Mutual Exclusion Protocols*” on November 2, 2012.
- W. Serwe participated to the Grid'5000 winter school, held on December 3–6, 2012 in Nantes. He gave a talk entitled “*Large Scale Distributed Verification using CADP on Grid'5000*” on December 6, 2012.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

CONVECS is a host team for the computer science master entitled “*Mathématiques, Informatique, spécialité : Systèmes et Logiciels*”, common to Grenoble INP and University Joseph Fourier.

In 2012, we carried out the following teaching activities:

- H. Evrard served as a teaching assistant in a course on “*Algorithmique et structures de données*”, given by Frédéric Wagner to the first year computer science engineering students of ENSIMAG (18 hours).
- H. Evrard served as a teaching assistant in a course on “*Introduction aux réseaux de communication*”, given by Roland Groz to the first year computer science engineering students of ENSIMAG (18 hours).
- H. Evrard served as a teaching assistant in a course on “*Systèmes d'exploitation et programmation concurrente*”, given by Yves Denneulin to the first year computer science engineering students of ENSIMAG (18 hours).
- H. Garavel created a block course entitled “*Advanced Concurrency Theory*” for the bachelor and master students of Saarland University (4 ECTS credits, assistant: Alexander Graf-Brill).
- A. Kriouile served as a teaching assistant in a course on “*Conception de circuits et architecture des ordinateurs*”, given by Frédéric Pétrout to the first year computer science engineering students of ENSIMAG (18 hours).
- F. Lang and W. Serwe gave, jointly with Pascal Raymond (CNRS, Verimag), a course on “*Méthodes formelles de développement*” to the computer science engineering students of CNAM (“*Conservatoire National des Arts et Métiers*”) Grenoble (27 hours).
- F. Lang and W. Serwe gave a course on “*Spécification et vérification de systèmes concurrents et temps-réel*” to the third year computer science engineering students of ENSIMAG (18 hours).
- G. Salaün gave lectures on “*Algorithmics and Object-Oriented Programming*” to the 2nd year computer science engineering students of ENSIMAG (36 hours).
- G. Salaün is co-responsible of the ISI (*Ingénierie des Systèmes d'Information*) department of ENSIMAG since September 1, 2011.

9.2.2. Juries

- G. Salaün was a panel member for Jose Antonio Martin Baena's PhD thesis, entitled "*Secure Adaptation of Software Services*", defended at the University of Málaga, Spain, on July 24, 2012.
- W. Serwe was a core committee / reading committee member of F. P. M. Stapper's PhD thesis, entitled "*Bridging Formal Methods: An Engineering Perspective*", defended at the Technical University of Eindhoven, The Netherlands, on November 8, 2012.

9.3. Popularization

H. Garavel participates to the committee in charge of organizing the Aerospace Valley series of industrial conferences on formal methods. The first conference, held on November 13, 2012, was a success, as it attracted 85 participants, among which 61 industrialists from 33 different companies.

R. Mateescu published a report about the 17th workshop on *Formal Methods for Industrial Critical Systems* [21].

In the context of the 20th anniversary of the Inria research center in Montbonnot, H. Garavel contributed to the collection of articles describing the evolution of computer sciences during the last 20 years [20].

9.4. Miscellaneous Activities

Within the Minalogic *Pôle de compétitivité mondial*, H. Garavel is a member of the operational committee of the EMSOC cluster (Embedded System on Chip).

H. Garavel was a reviewer for the German Excellence Initiative (Engineering Sciences Review Panel ING 14 for Clusters of Excellence), Bonn (Germany), January 10–12, 2012.

H. Garavel was a member of the working group in charge of restructuring the scientific themes of the LIG laboratory.

H. Garavel, F. Lang, R. Mateescu, G. Salaün, and W. Serwe attended the Inria evaluation seminar for teams working on "Embedded Systems and Real-Time", Rungis/Orly (France), March 19–20, 2012.

H. Garavel participated in the 40th Symposium for Research Award Winners of the Alexander von Humboldt Foundation, Bamberg (Germany), March 22–25, 2012.

H. Garavel participated in the "Cérémonie de remise du Prix Gay-Lussac Humboldt 2011", Académie des Sciences – Institut de France, Paris, April 10, 2012.

H. Garavel participated in the Annual Meeting (*Jahrestagung*) of the Alexander von Humboldt Foundation, Berlin, June 19–21, 2012.

H. Garavel was a reviewer for the "*Futur et Ruptures*" joint programme of Institut Mines-Télécom and Fondation Télécom.

F. Lang is a member of the "*commission du développement technologique*", which is in charge of selecting R&D projects for Inria Grenoble – Rhône-Alpes.

R. Mateescu is the correspondent of the "*Département des Partenariats Européens*" for Inria Grenoble – Rhône-Alpes.

G. Salaün was a member of the council of ENSIMAG until October 2012.

G. Salaün is a member of the council of the LIG laboratory.

G. Salaün is a member of the scientific council of Grenoble INP (*Conseil scientifique de l'institut*).

POP ART Project-Team

9. Dissemination

9.1. Scientific Animation

- Pascal Fradet served in the program committee of JFLA 2013 (vingt quatrièmes Journées Franco-phones des Langages Applicatifs).
- Gregor Goessler served in the program committees of the international conference DATE 2013.
- Bertrand Jeannet was Program Chair of the TAPAS workshop (Tools for Automatic Program Analysis) affiliated to SAS (Static Analysis Symposium), that was held in Deauville in September 2012.
- Alain Girault served in the program committees of the international conferences DAC 2012, MEMOCODE 2012, LCTES 2012, and APSIPA ASC 2012,

9.2. Teaching - Supervision - Juries

9.2.1. Supervision

PhD in progress: Vagelis Bebelis, “Advanced dataflow programming for embedded systems”, Grenoble University, since 12/2011, co-advised by Pascal Fradet and Alain Girault.

PhD in progress: Dmitry Burlyaev, “Specification and synthesis of fault-tolerant circuits”, Grenoble University, since 12/2011, co-advised by Pascal Fradet and Alain Girault.

PhD in progress: Gideon Smeding, Grenoble University, “Distribution of synchronous programs with respect to real-time constraints”, co-advised by Gregor Goessler and Joseph Sifakis since 12/2009.

PhD : Peter Schrammel, “Logico-numerical verification methods for discrete and hybrid systems”, Grenoble University, defended on 18/10/2012, co-advised by Alain Girault and Bertrand Jeannet

9.2.2. Juries

- Bertrand Jeannet was examiner for the PhD of Romain Testylier (University of Grenoble).
- Alain Girault was referee for the PhD thesis of Aurélien Monot (University of Lorraine), president of the PhD jury of Slim Bouguerra (University of Grenoble), and president of the PhD jury of Christophe Junke (University of Orsay).

BIPOP Project-Team

9. Dissemination

9.1. Scientific Animation

- A. Tonnelier: Membre du CNU, section 26.
- F. Bertails-Descoubes has been a reviewer in 2012 for ACM SIGGRAPH, ACM Transactions on Graphics,, and Eurographics.
- Jérôme Malick: Associate Editor for Journal of Global Optimization (Springer)
- P.-B. Wieber is member of the Program Committee of the IEEE-RAS International Conference on Humanoid Robots, reviewer for IEEE Transactions in Robotics, Int. J. Robotics Research, etc.
- B. Brogliato has been a reviewer for Automatica, Systems and Control Letters, Multibody System Dynamics, SIAM J. Control Optimization, IEEE Transactions Automatic Control, ASME Journal of Applied mechanics, European Journal of Mechanics A/Solids, Int. J. Robotics Research, etc.
- Organization of the summer school *Nonsmooth Contact Mechanics: Modeling and Simulation*, Aussois, 9-4 September 2012.
- V. Acary is co-animator (with R. Leine ETH Zurich) of the European network for nonsmooth dynamics. Member of the ENOC (EUROMECH Nonlinear Oscillations Conference) committee. Reviewer in 2012 for Math reviews, ASME Journal of Applied Mechanics, International Journal for Numerical Methods in Engineering, Journal of Franklin Institute, European Control Conference, American Control Conference, 51st IEEE Conference on Decision and Control (CDC 2012)

9.2. Teaching

Master : Bernard Brogliato, nonsmooth dynamical systems, 15h, M2, université de Limoges, France
 Doctorat : Bernard Brogliato, Multiple Impacts, 7.5h, Aussois Ecole d'été Inria Nonsmooth Contact Mechanics: Modeling and Simulation, France
 Doctorat : Vincent Acary, Numerical simulation of nonsmooth mechanical systems, 9.5h, Aussois Ecole d'été Inria Nonsmooth Contact Mechanics: Modeling and Simulation, France
 Doctorat : Florence Descoubes, Numerical simulation of hair dynamics and fibers, 3.5h, Aussois Ecole d'été Inria Nonsmooth Contact Mechanics: Modeling and Simulation, France
 Master : F. Descoubes, Optimisation numérique, 30h equiv. TD, niveau M1, ENSIMAG, Grenoble INP
 Master : Jérôme Malick, Optimisation numérique, 60h eqTD, Master1 of ENSIMAG
 Master : P.-B. Wieber, Autonomous Robotics, 13.5h eqTD, Master2 Mosig

9.3. Supervision

PhD : Andrei Herdt, Model predictive control of a humanoid robot, Mines ParisTech, 27 Jan. 2012, Pierre-Brice Wieber and Bernard Espiau
 PhD : Mehdi Benallegue, Mirror controller: A Bio-Inspired Computational Approach for Human Walking Motion Imitation by a Humanoid Robot, Université Montpellier 2, 15 Dec. 2011, Pierre-Brice Wieber and Bernard Espiau.
 PhD : Zohaib Aftab, Dynamic Simulation of Balance Recovery: Application to the standing passengers of public transport, université de Lyon 1, 21 novembre 2012, Pierre-Brice Wieber and Thomas Robert and Bernard Brogliato
 PhD in progress : Mounia Haddouni, 01 mai 2012, Vincent Acary et Bernard Brogliato

PhD in progress : Olivier Huber, 01 octobre 2011, Vincent Acary et Bernard Brogliato

PhD in progress : Narendra Akahdkar, 01 décembre 2012, Vincent Acary et Bernard Brogliato

PhD in progress : Alexandre Derouet-Jourdan, 01 septembre 2010, Florence Descoubes et Joelle Thollot

PhD in progress : Sofia Zaourar, 01 octobre 2011, Jérôme Malick et Bernard Brogliato

PhD in progress : Romain Casati, 01 octobre 2011, Florence Descoubes et Bernard Brogliato

PhD in progress : Federico Pierucci, 01 octobre 2012, Jérôme Malick et Zaid Harchaoui et Anatoli Ioudilski

PhD in progress : Saed al Homsy, 01 octobre 2012, Pierre-Brice Wieber et Bernard Brogliato

PhD in progress : Jory Lafaye, 01 octobre 2012, Pierre-Brice Wieber et Bernard Brogliato

9.3.1. Popularization

- Two conferences on Robotics and Mathematics “Les robots, des puces plein la tête”, for high-school students, and for high-school math teachers.

MISTIS Project-Team

8. Dissemination

8.1. Scientific Animation

Since September 2009, F. Forbes is head of the committee in charge of examining post-doctoral candidates at Inria Grenoble Rhône-Alpes ("Comité des Emplois Scientifiques").

Since September 2009, F. Forbes is also a member of the Inria national committee, "Comité d'animation scientifique", in charge of analyzing and motivating innovative activities in Applied Mathematics.

Florence Forbes is a member of an INRA committee (CSS MBIA) in charge of evaluating INRA researchers once a year.

F. Forbes is part of an INRA (French National Institute for Agricultural Research) Network (MSTGA) on spatial statistics.

F. Forbes and S. Girard were elected as members of the bureau of the "Analyse d'images, quantification, et statistique" group in the Société Française de Statistique (SFdS).

S. Girard is associate editor of the international journal "Statistics and Computing".

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Stéphane Girard

Master : Statistique inférentielle avancée, 45h, M1, Ensimag (Grenoble INP), France.

Florence Forbes

Master : Mixture models and EM algorithm, 12h, M2, UFR IM2A, Université Grenoble I, France.

M.-J. Martinez is faculty members at Univ. Pierre Mendès France, Grenoble II.

J.-B. Durand is a faculty member at Ensimag, Grenoble INP.

F. Enikeeva is on a half-time ATER position at Ensimag, Grenoble INP.

C. Bakhous and J. El Methni are both moniteur at University Joseph Fourier.

PhD & HdR

PhD in progress : Jonathan El Methni, Modèles en statistique des valeurs extrêmes, since October, 2010, Stéphane Girard

PhD in progress : Christine Bakhous, Problèmes de sélection de modèles en IRM fonctionnelle, since November, 2010, Florence Forbes and Michel Dojat

PhD in progress : Gildas Mazo, Modèles spatiaux en statistique des valeurs extrêmes, since October, 2011, Florence Forbes and Stéphane Girard

PhD in progress : El Hadji Deme, Réduction du biais en statistique des valeurs extrêmes, since October, 2009, Stéphane Girard

PhD in progress : Seydou-Nourou Sylla, Modélisation statistique pour l'analyse de causes de décès décrites par autopsie verbale en milieu rural africain, since October, 2012, Stéphane Girard

8.2.2. Juries

Stéphane Girard was a member of the Strasbourg university committee in charge of examining applications for assistant professor in 2012.

Florence Forbes was also a member of an INRA committee in charge of examining applications for junior researcher positions in 2012 at dept MBIA of INRA.

F. Forbes was involved in the PhD committees of

- El Ghali Lazrak from Inria Nancy and INRA Aster Mirecourt, Université de Lorraine in October 2012 (reviewer).
- Alexandre Janon from Inria team MOISE and LJK Grenoble. November 2012 (Examineur).
- Mahdi Bagher from Inria team Maverick and LJK Grenoble. November 2012 (Examineur).

F. Forbes was also involved in the HDR committee of Michael Blum, CR CNRS at TimC in Grenoble. December 2012 (Examineur).

NANO-D Team

8. Dissemination

8.1. Teaching - Supervision

8.1.1. Teaching

Licence : Stephane Redon, "Introduction to computer science", INF311 and INF321, 80h, Ecole Polytechnique, Paris, France

8.1.2. Supervision

PhD : Svetlana Artemova, Adaptive Algorithms for molecular simulation, Grenoble University, May 30, 2012, Stephane Redon

PhD : Mael Bosson, Adaptive algorithms for computational chemistry and interactive modeling, Grenoble University, October 19, 2012, Brigitte Bidegaray and Stephane Redon

PhD in progress : Petr Popov, Computational methods for protein structure prediction, November 2011, Sergei Grudinin

8.2. Participation to conferences, seminars

- S. Grudinin and P. Popov attended "Journées du GdR BiMGdR Bim", Paris (January 20 2012).
- S. Grudinin and P. Popov participated in a workshop "Exploring Protein Interactions through Theory and Experiments", Lausanne (September 24-26 2012).
- S. Grudinin gave a talk titled "Fast Fitting of Atomic Structures into Cryo-EM Density Maps Using Hermite Orthogonal Functions" in a workshop "Computational Challenges in Structural Biology", Strasbourg (November 14-15 2012).
- P. Popov participated in a workshop "Computational Challenges in Structural Biology", Strasbourg (November 14-15 2012).

NECS Project-Team

9. Dissemination

9.1. Scientific Animation

- Carlos Canudas de Wit has been an European project evaluator (STREPs and IPs) on the following programs: Cognitive systems and Robotics (FP7-ICT 2002) and Chat (<http://www.ict-chat.eu/>). He was elected as member of the Board of Governors of the IEEE Control System Society. He is vice-president of the European Control Association (EUCA) and member of the steering committee in charge of redefying the new EUCA constitution. Since 2010, He is Editor of the Asian Journal of Control.
- H. Fourati has been a peer-reviewer for international journals (IEEE Sensors Journal, IEEE/ASME Transactions on Mechatronics).
- D. Simon was member of the ETFA'12 (IEEE Int. Conference on Emerging Technologies and Factory Automation), CIFA'12 (Conference Internationale Francophone d'Automatique) and CAR'12 (Control Architecture of Robots) program committees, and of the IFAC Joint Conference (Grenoble, february 2013) organization committee. Involvement within the API (Automatique Pour l'Informatique) PEPS headed by E. Rutten (SARDES). Peer reviewer for the ICSCS'12, MED'12 and ECC'13 international conferences. Scientific direction of the farewell robotics seminar given in honour of Bernard Espiau.
- F. Garin has been a peer-reviewer for international journals (IEEE Trans. Automatic Control, IEEE Trans. Inform. Theory, Automatica) and conferences (CDC 2012, NecSys2012, ECC 2013) and for a chapter in a book in Springer LNCS.
- A. Kibangou has been a peer-reviewer for international journals (Automatica, IEEE Trans. on Control Systems and Technology, Elsevier Signal Processing, IEEE Trans. on Signal Processing, Electronics Letters, Int. J. of Adaptive control and Signal Processing, and System control letters) and conferences (CDC 2012, CIFA 2012, ACC 2013, ECC 2013). Locally, he is the organizer of seminars for the Control Department of GIPSA-LAB.
- A. Ben Khaled gave a talk at the "Logiciels de Modélisation et de Calcul Scientifique" day (LMCS 2012) organized at Paris la Défense by EDF, IFPEN, Acssysteme and Esilv in December.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence: H. Fourati, Informatique Industrielle, 100h, L1, IUT 1 (GEII2), University Joseph Fourier, France;

Licence: H. Fourati, Automatique, 24h, L2, IUT 1 (GEII2), University Joseph Fourier, France;

Licence: H. Fourati, Automatismes industriels et réseaux, 90h, L1 et L2 et 2, IUT 1 (GEII2), University Joseph Fourier, France.

Doctorat, Master: H. Fourati, Network Theory, 20h, Kazakhstan National Technical University (KazNTU), Kazakhstan.

Licence: A. Kibangou, Automatique, 62h, L2, IUT1 (GEII1), University Joseph Fourier, France.

Licence: A. Kibangou, Mathématiques, 14h, L2, IUT1 (GEII1), University Joseph Fourier, France.

Licence: F. Garin, Automatique, 32h, L2, IUT1 (GEII1), University Joseph Fourier, France.

Doctorat, Master: C. Canudas de Wit, Advanced control for transportation and vehicular systems, University of Sevilla, Spain.

Doctorat, Master: C. Canudas de Wit, Vehicular transportation, 20h, University of Valencia, Spain.
 Doctorat, Master: C. Canudas de Wit, Modeling and forecasting of Traffic Systems : HYCON2 case study, 6h, University of Madrid, Spain.

9.2.2. Supervision

PhD: Patrick Jocelyn Andrianiaina, Robust control under weekend realtime constraints, Grenoble University, October 26 2012, co-advised by D. Simon and A. Seuret.

PhD: Nicolas Cardoso De Castro, Energy-aware control and communication co-design in wireless Networked Control Systems, Grenoble University, October 4th 2012, co-advised by C. Canudas de Wit and F. Garin.

PhD: Gabriel Rodrigues de Campos, Agreement strategies for multi-robot systems, Grenoble University, November 23th 2012, co-advised by A. Seuret and C. Canudas de Wit.

PhD in progress : Valentina Ciarla, Commande d'un système de puissance électrique pour personne âgée et/ou handicapée, Grenoble University, Sept 2010-Sept 2013, co-advised by C. Canudas de Wit, F. Quaine, and V. Cahouet.

PhD in progress : Abir Ben Khaled, Distributed real time simulation of numerical models: application to powertrain, Grenoble INP, Jan. 2011 - Dec. 2013, co-advised by D. Simon and M. Ben Gaid (Institut Français de Pétrole Energies Nouvelles).

PhD in progress : Luis Leon Ojeda, Modélisation macroscopique, estimation de la demande et prédiction du flux pour les systèmes de transport intelligents, Grenoble University, April 2011-March 2014, Co-advised by C. Canudas de Wit and A. Kibangou.

PhD in progress : Dominik Pisarski, Contrôle d'accès collaboratif : application à la Rocade Sud de Grenoble, Grenoble University, June 2011-May 2014, Advised by C. Canudas de Wit.

PhD in progress: Ruggero Fabbiano, Distributed source seeking control, Grenoble University, Dec. 2011 - Nov. 2014, by C. Canudas de Wit and F. Garin.

PhD in progress : Thi-Minh Dung Tran, Consensus en temps fini et ses applications en estimation distribuée pour les systèmes de transport intelligents, Grenoble University, co-advised by A. Kibangou and C. Canudas de Wit, Jan. 2012-Jan. 2015.

PhD in progress : Giovanni de Nunzio, Control of communicating vehicles in urban environment, Grenoble University, co-advised by C. Canudas de Wit and P. Moulin (IFPEN), Sep. 2012-Aug. 2015

PhD in progress : Aida Makni, Estimation multi-capteurs et commande temps-réel tolérante aux fautes d'un drone aérien, Grenoble INP, Oct. 2012 - Sep. 2015, co-advised by H. Fourati, A. Kibangou and C. Canudas de Wit.

9.2.3. Juries

- D. Simon (reviewer and member) : J.-B. Chaudron, Jan. 25 2012, Onera and ISAE, Toulouse University;
- D. Simon (member) : Ch. Fiter, Sep. 25 2012, Lagis, Lille University ;
- D. Simon and A. Seuret (members) : P.J. Andrianiaina, Oct. 26 2012, Grenoble University;
- A. Seuret (member) : G. Rodrigues de Campos, Nov. 2012, Grenoble University.
- C. Canudas de Wit (member): S. Martin, Nov. 2012, Grenoble University.
- C. Canudas de Wit (member and reviewer): D. Efimov, HDR, Nov. 2012.

9.3. Popularization

- D. Simon has been involved in the ISN programme for the training of highschool teachers in Computer Science.
- C. Canudas de Wit animated the In'Tech seminar (Grenoble, Nov. 2012).
- C. Canudas de Wit animated seminars in CPS London Oct 2012 (http://controls.ame.nd.edu/mediawiki/index.php/London_CPS_Workshop#Participants) and Lund workshop (<http://www.lccc.lth.se/index.php?page=workshop1210program>).

OPALE Project-Team

9. Dissemination

9.1. Scientific Animation

- P. Goatin is member of the Organizing Committee of the 14th International Conference on Hyperbolic Problems: Theory, Numerics and Applications (HYP2012). Padova (IT). June 2012. <http://www.hyp2012.eu/>
- T. Nguyen is member of the PRACE expert pool since November 2012 (Partnership for Advanced Computing in Europe)
- T. Nguyen is member of the Program Committee for the 9th Intl. Conf. in Cooperative Design, Visualization and Engineering (CDVE2012). Osaka (JP). September 2012.
- T. Nguyen is member of the Program Committee for the 8th Intl. Conf. on Networking, Grids and Virtualization (CLOUD COMPUTING2012). Nice (FR). July 2012. <http://www.aria.org/conferences2012/CLOUDCOMPUTING12.html>
- T. Nguyen is Advisory Chair and member of the Program Committee for the 8th Intl. Conf. on Cloud Computing and Services (ICNS2012). Saint-Maarten (NL). March 2012. <http://www.aria.org/conferences2012/ICNS12.html>
- T. Nguyen is member of the Program Committee for the 1st Intl. Conf. on Smart Grids and Green IT Systems (SMARTGREENS2012). Porto (PT). April 2012. <http://www.smartgreens.org/CallForPapers.aspx>
- T. Nguyen is member of the Program Committee for the 2nd International Conference on Cloud and Green Computing (CGC2012), Xiangtan (China), November 2012. <http://kpnm.hnust.cn/confs/cgc2012>
- T. Nguyen is member of the Program Committee of the 3rd Intl. Conf. on Parallel, Distributed, Grid and Cloud Computing for Engineering. Pécs, Hungary, March 2013. <http://www.civil-comp.com/conf/pareng2013.htm>
- T. Nguyen is member of the Editorial Board of the Intl. Journal on Advances in Intelligent Systems (ARIA Eds.)
- T. Nguyen is member of the Editorial Board of the Intl. Journal on Advances in Software (ARIA Eds.)

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence: Introduction to Numerical Analysis, 71,5 hrs, Ecole Polytechnique Universitaire (EPU), Nice Sophia Antipolis (J.-A. Désidéri, A. Zerbinati).

Licence: Numerical Methods I, 19.5 hrs, Ecole Polytechnique Universitaire (EPU), Nice Sophia Antipolis (J.-A. Désidéri).

Licence: Solid Mechanics (statics, kinematics, dynamics, energetics), 45.5 hrs, Ecole Polytechnique Universitaire (EPU), Nice Sophia Antipolis (F. Z. Oujebbour).

Licence: Linear Systems, 39 hrs, L3, Ecole Polytechnique Universitaire (EPU), Nice Sophia Antipolis (R. Duvigneau).

Licence: Partial Differential Equations, 36 hrs, L3, Ecole Polytechnique Universitaire (EPU), Nice Sophia Antipolis (R. Duvigneau).

Master: Advanced Optimization, 40.5 hrs, M2, Ecole Polytechnique Universitaire (EPU), Nice Sophia Antipolis (J.-A. Désidéri, R. Duvigneau).

Master: Multidisciplinary Optimization, 22.5 hrs, joint ISAE ("Complex Systems") and M2 (Mathematics), Toulouse (J.-A. Désidéri, R. Duvigneau).

Master: Conservation laws and traffic flow models, 32 hrs, M2, Ecole Polytechnique Universitaire (EPU), Nice Sophia Antipolis (P. Goatin).

9.2.2. Supervision

PhD & HdR :

PhD : Imane Ghazlane, *Optimisation aérodynamique et structurale de la voilure d'un avion de transport avec la méthode adjointe*, University of Nice Sophia Antipolis, December 2012, supervisors: J. A. Desideri and Gérald Carrier (ONERA/DAAP).

PhD : Samira El Moumen, *Portfolio Management in Finance*, Ecole Mohammadia d'Ingénieurs (EMI), Rabat, September 2012, supervisors: R. Aboulaich, R. Ellaia (Rabat) and A. Habbal.

PhD in progress : Sébastien Bourasseau, *Méthodes de raffinement de maillages non structurés basées sur le vecteur adjoint pour le calcul de coefficients aérodynamiques*, October 2011, Supervisors: Jean-Antoine Désidéri and Jacques Peter (ONERA/DSNA).

PhD in progress : Aalae Benki, *Optimisation concurrente de forme de coque mince en régimes élastoplastique et de crash*, October 2010, supervisor: A. Habbal.

PhD in progress : Maria Laura Delle Monache, *Traffic flow modeling by conservation laws*, October 2011, supervisor: P. Goatin

PhD in progress : Mohamed Kaicer, *Group lending : analysis of asymmetric information using game theory. Analysis design and implementation of a simulator adapted to microfinance market*, October 2009, Supervisors: R. Aboulaich (Rabat) and A. Habbal.

PhD in progress : Jérémie Labroquère, *Optimization of Flow Control Devices*, October 2010, Supervisors: Jean-Antoine Désidéri and Régis Duvigneau.

PhD in progress : Matthias Mimault, *Crowd motion modeling by conservation laws*, October 2012, supervisor: P. Goatin

PhD in progress : Andrea Minelli, *Optimisation simultanée des performances aérodynamiques et du bang sonique d'un aéronef supersonique*, October 2010, Supervisors: Jean-Antoine Désidéri and Itham El Salah Dinh (ONERA/DAAP).

PhD in progress : Maxime Nguyen Dinh, *Qualification des simulations numériques par adaptation anisotropique de maillages*, October 2011, Supervisors: Jean-Antoine Désidéri and Jacques Peter (ONERA/DSNA).

PhD in progress : Fatima Zahra Oujebbour, *Modèles de jeux en optimisation de forme en emboutissage*, October 2010, Supervisors: A. Habbal.

PhD in progress : Enric Roca Leon, *Simulation aéromécanique pour l'optimisation de rotor d'hélicoptère en vol d'avancement*, October 2011, Supervisors: Jean-Antoine Désidéri and Arnaud Le Pape (ONERA/DAAP).

PhD in progress : Laurentiu Trifan, *Plateforme collaborative pour l'optimisation multidisciplinaire*, December 2009, Supervisors: Jean-Antoine Désidéri and Toan Nguyen.

PhD in progress : Adrien Zerbinati, *Optimisation multidisciplinaire robuste pour application à l'automobile*, January 2010, Supervisors: Jean-Antoine Désidéri and Régis Duvigneau.

9.2.3. Juries

- T. Nguyen was member of the PhD Defense Jury of Mr. Balaji Raghavan, Université de Technologie de Compiègne, December 2012.
- P. Goatin was referee and member of the PhD Defense Jury of Aude Hofleitner, Université Paris-Est, December 2012.

9.3. Popularization

J.-A. Désidéri has delivered the conference “*Modélisation et simulation : lorsque l’ingénierie devient numérique*” (“Modelling and simulation : when engineering becomes numerics”) to engineering students in Avignon (May 2012).

P. Goatin has delivered the conference “Comment les mathématiques contribuent-elles à la gestion du trafic routier?” to the Université d’été de mathématique “Modèles mathématiques et réalité” organised by the Creteil Academy in Sourdun (August 2012).

BAMBOO Project-Team

8. Dissemination

8.1. Scientific Animation

Hubert Charles is director of studies of the "Bioinformatique et Modélisation (BIM)" track at the INSA-Lyon. He is co-director of the Biosciences Department of the INSA-Lyon, and co-director of the Doctoral School E2M2.

Marie-France Sagot is a member of the Scientific Advisory Board ("Conseil Scientifique (COS)" for the Inria Grenoble Rhône-Alpes Research Center. She is since 2012 member of the Scientific Board of the French Society of Computer Science (SFI). She was co-chair for one area track of the 20th Annual International Conference on Intelligent Systems for Molecular Biology (ISMB) 2012, and co-chair for the RECOMB Satellite Workshop Comparative Genomics (RECOMB-CG) 2012. She is Editor-in-Chief of *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, and Associate Editor of *BMC Bioinformatics*, *Algorithms for Molecular Biology*, *Journal of Discrete Algorithms*, and *Lecture Notes in Bioinformatics*. She is member of the Steering Committee for the European Conference on Computational Biology (ECCB), for the International Symposium on Bioinformatics Research and Applications (ISBRA), and for the Latin American Theoretical Informatics Symposium (LATIN). She was member of the Program Committee for BSB, ISMB, PACBB, PSC, WABI. She is a member of the scientific council of the Labex EcoFect.

Fabrice Vavre is director of the GDR 2153(CNRS) "Interactions multipartenaires dans les populations et les communautés d'insectes". He is also member of the management committee and responsible of a working group in the COST Action FA0701 "Arthropod Symbiosis: from fundamental studies to pest and disease management" which ended in June 2012. He was president of a selection committee for a teaching position at the University Lyon 1 in Microbial Genetics. He was elected member of the Section 29 of the Comité National de la Recherche Scientifique. He is a member of the scientific council of the Labex EcoFect.

Alain Viari is since 2012 Deputy Scientific Director at Inria in charge of ICST for Life and Environmental Sciences. He represents Inria in several national instances related to Life Sciences and Health and is member of several scientific advisory boards (IMMI (Institut de Microbiologie et Maladies Infectieuses / Aviesan); IRT (Institut de Recherche Technologique) BioAster). He is the French coordinator of the Bioinformatics working group of the France-US joint committee on Science and Technology. He is a member of the Scientific Advisory Board ("Conseil Scientifique (COS)" for the Inria Grenoble Rhône-Alpes Research Center.

Cristina Vieira is director of the GDRE "Comparative genomics" since the GDRE was renewed in 2010.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Three members of the BAMBOO project are professors or associate professors at the University Claude Bernard in Lyon and at the INSA Lyon: Hubert Charles, Vincent Lacroix, and Cristina Vieira. They therefore have a full teaching service (at least 192 hours) except for Cristina Vieira who became since 2010 a Junior Member of the Institut Universitaire de France.

Various members of the EPI have developed over the years courses in biometry, bioinformatics and evolutionary biology at all levels of the University as well as at the "École Normale Supérieure" (ENS) of Lyon and the INSA ("Institut National de Sciences Appliquées"). Two members of the EPI have also in the past participated in, or sometimes organised courses or teaching modules at the international level: creation and support of a Master's course in Ho-Chi-Minh, Vietnam, and creation and direction of a PhD Program in Computational Biology in Lisbon, Portugal (<http://bc.igc.gulbenkian.pt/pdbc/>).

8.2.2. Supervision

The following are the PhDs defended in BAMBOO in 2012.

PhD: Patricia Simões, University of Lyon 1, March 14, supervisors S. Charlat and M.-F. Sagot

PhD: Paulo Vieira Milreu, University of Lyon 1, December 19, supervisors C. Gautier, V. Lacroix and M.-F. Sagot

8.2.3. Juries

M.-F. Sagot: Reviewer of the HDR of Guillaume Blin (University of Paris-Est) and of the PhDs of Stéphane Prin (Muséum National d'Histoire Naturelle) and Adam Smith (University of Évry).

F. Vavre: Member of the committee for the HDR of Franck Prugnolle (University of Montpellier), and for the PhDs of Barbara Reumer (University of Leiden), Winka Le Clec'h (University of Poitiers), Johan Decelle (University of Paris 6) and Flore Zele (University of Montpellier).

A. Viari: Member of the committee for the PhDs of Adam Smith (University of Évry) Philippe Bordron (University of Nantes).

8.3. Popularization

Fabrice Vavre gave two talks, respectively entitled "Quand les parasites utilisent nos gènes, et réciproquement" and "Sommes-nous manipulés par nos gènes", at the Université Ouverte. He also gave a talk entitled "Diversité des interactions hôtes-microorganismes et nouvelles méthodes de lutte contre les maladies infectieuses" at the General Meeting of the Biotechnologies Professors.

BEAGLE Team

8. Dissemination

8.1. Scientific Animation

- G Beslon is a nominated member at the CoNRS, section 06
- G Beslon is chair of the Scientific Committee of the Rhône-Alpes Institute for Complex Systems (IXXI).
- C Knibbe was vice-chair of the Scientific Committee of the Rhône-Alpes Institute for Complex Systems (IXXI).
- C Knibbe was a member of the Program Committee of ECCB 2012 (11th European Conference on Computational Biology)
- C Knibbe was a member of the Program Committee of the annual workshop of the Faculté des Sciences et Technologies of Université Lyon 1.
- C Knibbe participated in the evaluation of project proposals of the Blanc SVSE 7 2012 ANR program (Biodiversité, évolution, écologie et agronomie).
- H Berry is a Member of the Inria Evaluation Committee (Commission d'Evaluation) (2011-2015).
- H Berry is a Member of the Inria hiring committee 2012 (selection for associate research professor positions, jury d'admissibilité et d'admission).
- H Berry is a Member of the SPECIF committee (best French PhD in Computer Science) (2011-2012)
- H Berry is a Member of the Evaluation committee for the 2012 "Systems Biology" call for funding of the "ITMO Cancer".
- H Berry is a Reviewer for the 2012 Call for funding of the FNRS, Belgium.
- E Tannier is co-chairing the organizing committee of Recomb satellite workshop on comparative genomics, Lyon 2013
- E Tannier is co-chairing the organizing committee of "Models and Algorithms for Genome Evolution", Montreal 2013
- E Tannier was a member of the Program Committee of ECCB 2012 (11th European Conference on Computational Biology)
- E Tannier was a member of the Program Committee of Recomb satellite workshop on comparative genomics, Rio 2012
- E Tannier is a Reviewer for the 2012 Call for funding of the Fonds Québécois pour la recherche

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Several of us are half time teachers, and all their teaching record is not necessarily reported here. Researchers, post-doc and students teaching modules are detailed.

Licence and Master: Guillaume Beslon, computer architecture and bioinspired intelligence at the computer science department of INSA Lyon, 192h eq TD

Licence: Carole Knibbe, "Algorithmique et programmation procédurale", 67 h eqTD, niveau L2 (+ responsabilité de l'UE), Université C. Bernard Lyon 1, France.

Licence: Carole Knibbe, "Encadrement de stage en informatique ", 3 h eqTD, niveau L3, Université C. Bernard Lyon 1, France.

Master: Carole Knibbe, "Intelligence artificielle bio-inspirée ", 14 h eqTD, niveau M2R, Université C. Bernard Lyon 1, France.

Master: Carole Knibbe, "Méthodologie scientifique et préparation à la recherche ", 24 h eqTD (+ responsabilité de l'UE), niveau M2R, Université C. Bernard Lyon 1, France.

Master: Carole Knibbe, "Modélisation et simulation en biologie et médecine ", 9 h eqTD (+ responsabilité de l'UE), niveau M2R, Université C. Bernard Lyon 1, France.

Master: Christophe Rigotti, Data Mining, 25 H eqTD, M1, INSA Lyon

Licence: Christophe Rigotti, Imperative Programming, 44 H eqTD, L1, INSA Lyon

Licence: Christophe Rigotti, Object-Oriented Programming 42 H eqTD, L2, INSA Lyon

Licence: Christophe Rigotti, Computer Simulation 71 H eqTD, L2, INSA Lyon

Licence: Bérénice Batut, Computer Science, 64h eq TD, INSA Lyon

Licence: Jules Lalouette, Computer Science, 64h eq TD, INSA Lyon

Licence : Stephan Fischer, "Mathématiques", 74 h eqTD, prépa intégrée première année, INSA de Lyon, France.

Licence: David P. Parsons, Algorithmique, Programmation Orientée Objet - C++, 19HeqTD, niveau L3, INSA Lyon, France

Licence: David P. Parsons, Approche Logique de l'Intelligence Artificielle, 57HeqTD, niveau L3, INSA Lyon, France

Licence: David P. Parsons, Développement d'Applications pour les Systèmes d'Information, 66HeqTD, niveau L3, INSA Lyon, France

Licence: David P. Parsons, Systèmes d'Exploitation, 38HeqTD, niveau L3, INSA Lyon, France

Master: Eric Tannier, Discrete Mathematics, 8h, M1 UCBL and M1, INSA Lyon

Master: Eric Tannier, Mathématiques et Informatique pour le génome, 26h, M1 INSA Lyon

Master: Eric Tannier, Bioinformatique, 24h, M1 ISBM Monastir, Tunisie

Master: Eric Tannier, Evolution des systèmes, 2h, M2, Université de Montpellier 2

Licence: Eric Tannier, Histoire des théories de l'évolution, 2h, L3, ENS Lyon

8.2.2. Supervision

PhD & HdR :

PhD: Anne-Sophie Coquel, Dynamique de l'agrégation protéique chez la bactérie *Escherichia coli*, soutenue le 16 Novembre 2012, co-supervisée par H. Berry (Beagle) and A. Lindner (INSERM U1001, Cochin Medical School, Paris), INSA Lyon, ED 512 Informatique

PhD: Pierre-Nicolas Mougél. Title: Finding homogenous collections of dense subgraphs using constraint-based data mining approaches. Application to the analysis of scientific collaboration networks and protein interaction graphs. INSA Lyon, September 14, 2012. Supervised by C. Rigotti.

PhD: Bertrand Caré. Title: Modèles individu-centrés de l'impact fonctionnel des hétérogénéités de diffusion et de distribution spatiale des protéines de signalisation cellulaire. INSA Lyon, November 26, 2012. Co-supervised by H. Soula and C. Rigotti.

PhD : David P. Parsons, "Sélection Indirecte en Évolution Darwinienne, Mécanismes et Implications", INSA de Lyon, December 8, 2011, co-supervised by Guillaume Beslon and Carole Knibbe

PhD in progress : Stephan Fischer, "Modélisation mathématique des phénomènes de sélection indirecte dans l'évolution darwinienne", started in sept. 2010, co-supervised by Guillaume Beslon and Carole Knibbe, with the help of Samuel Bernard (Inria Dracula team)

PhD in progress : Bérénice Batut, "Etude de l'évolution réductive des génomes bactériens par analyses bioinformatiques et expériences d'évolution in silico", co-supervised by Guillaume Beslon and Gabriel Marais (LBBE), with the help of Carole Knibbe

PhD in progress: Jules Lallouette, Transport dans les réseaux complexes : le cas des réseaux mixtes neurones/cellules gliales, September 2011, supervised by Hugues Berry

PhD in progress: Magali Semeria, Biologie évolutive des systèmes, encadrée par E. Tannier et L. Gueguen (LBBE)

PhD in progress: Gael Kaneko, "modeling of the effect of chromatin dynamic on the stochasticity of gene expression", April 2009. Supervisors: Guillaume Beslon and Olivier Gandrillon (CGPhyMC, UMR CNRS 5534).

8.2.3. Juries

- G Beslon participated to the PhD jury of Linda Dib (Université Pierre et Marie Curie), "Détection des mutations simultanées dans les séquences protéiques non-divergentes". March 26 2012.
- G Beslon participated to the PhD jury of Hervé Le Nagard (Université Pierre et Marie Curie), Etude de l'émergence et de l'impact de la complexité phénotypique au travers de modèles théoriques et computationnels. December 15 2011
- E Tannier is invited to the HDR jury of N Thierry-Mieg, "smart pooling and interactomes", Grenoble, 2013
- E Tannier is invited to the Ph-D jury of G. Drillon, 2013 (reviewer)
- E Tannier participated to the Ph-D jury of C. Berthelot, ENS Paris, 2012
- H Berry participated to the Ph-D jury of Mathieu Lefort, "Apprentissage spatial de corrélations multimodales par des mécanismes d'inspiration corticale", Nancy, July 04, 2012 (reviewer)
- H Berry participated to the Ph-D jury of Guillaume Core, "Hétérogénéité phénotypique dans les populations d'origine clonale: origine et conséquences", Paris, June 27, 2012 (reviewer)
- H Berry participated to the Ph-D jury of Hana Belmabrouk, "Modélisation et simulation du complexe macroglobulaire des papillons de nuit", Nancy, May 15, 2012 (reviewer)

8.2.4. International Invited talks

- H Berry, "The remarkable effect of topology on calcium wave propagation in astrocyte networks", Workshop on the organization of excitable dynamics in hierarchical neural networks, 23-25 mai 2012, Bremen, Germany
- G Beslon, "Experimental approaches in ecology and evolution within yeast", EMBL Heidelberg, nov 2012

8.3. Popularization

- G Beslon participated to the "nuit des chercheurs" event in Villeurbanne on September 28, 2012 for the animation of a stand named "biologie artificielle - biologie synthétique".
- E Tannier teaches at the Université Populaire de Lyon, on science and politics, March 2012
- E Tannier participated to a scientific event "Les fourneaux de l'invention" gathering physicists, sociologists, biologists in Lyon, April 2012

DRACULA Project-Team

9. Dissemination

9.1. Scientific Animation

The year 2012 was marked by the following events:

- The edition of 6 volumes of the journal MMNP (Mathematical Modelling of Natural Phenomena) on the following topics: cancer modeling, solitary waves, epidemiology, modelling phenomena on micro- and nano-scale, immunology, biological oscillations (see <http://journals.cambridge.org/action/displayJournal?jid=MNP>).
- The co-organization of a monthly seminar (INRIabcd, every last friday), jointly with Inria team BEAGLE, and the organization of a seminar on biomathematics (on thursday, twice a month) (see archives for 2012 : <http://bsmc.insa-lyon.fr/~M3B/fr/seminaire.php?annee=2012>).
- Organization of the Third International Conference of the Moroccan Society of Applied Mathematics (SM2A), Marrakesh, 10-13 September (see <http://sm2a-2012.ucam.ac.ma/en/index.html>).
- Organization of a workshop dedicated to "cell population dynamics", Tunis, 26-28 November 2012 (<http://euromedbiomaths.org/atelier-M3CD-Tunis/>).
- Organization of a summer school dedicated to the interactions between stochastic and deterministic approach for population dynamics, Paris, 06-14 September 2012 (see <http://www.cmap.polytechnique.fr/~ecolemathbio2012/index.php>).

9.2. Teaching - Supervision

9.2.1. Teaching

- Licence : Thomas LEPOUTRE, Dynamique de populations, 12h, L3, ENS Lyon.
- Licence : Thomas LEPOUTRE, Dynamique de populations structurées, 9h, L3, ENS Cachan, Paris.
- Licence : Samuel BERNARD, Algèbre linéaire et analyse matricielle, 38h, L3, INSA Lyon.
- Licence : Laurent PUJO-MENJOUET, EDP réaction-diffusion, 15h, L3, UCBL Lyon.
- Licence : Laurent PUJO-MENJOUET, EDO-Systèmes dynamiques, 40h, L3, INSA Lyon.
- Licence : Laurent PUJO-MENJOUET, Équations différentielles et EDP, 36h, L3, UCBL Lyon.
- Licence : Laurent PUJO-MENJOUET, Fonctions de plusieurs variables, 36h, L2, UCBL Lyon.
- Licence : Laurent PUJO-MENJOUET, Suite et série de fonctions, 36h, L2, UCBL Lyon.
- Licence : Laurent PUJO-MENJOUET, Projet Etudiant, 09h, L2, UCBL Lyon.
- Licence : Romain Yvinec, Équations différentielles Ordinaires, 18h, L2, UCBL Lyon.
- Licence : Romain Yvinec, Mesure et intégration, 24h, L3, UCBL Lyon.
- Licence : Philippe MICHEL, Analyse appliquée, 56h, L3, ECL Lyon.
- Licence : Philippe MICHEL, Analyse numérique, 16h, L3, ECL Lyon.
- Licence : Philippe MICHEL, Probabilités et statistique, 16h, L3, ECL Lyon.
- Licence : Philippe MICHEL, Optimisation 16h en L3, ECL Lyon.
- Licence : Philippe MICHEL, Projet d'études, 20h, L3, ECL Lyon.
- Master : Thomas LEPOUTRE, Préparation à l'agrégation, calcul scientifique, 30h, M2, UCBL Lyon.
- Master : Thomas LEPOUTRE, Equations de Hamilton Jacobi, 18h, M2, ENS Lyon.

Master : Fabien CRAUSTE, Equations structurées et hématopoïèse, 2h, M2, UCBL Lyon.
Master : Samuel BERNARD, Modélisation en biologie, 4h, M2, ENS Lyon.
Master : Laurent PUJO-MENJOUET, Modélisation en biologie et médecine, 4h, M2, ENS Lyon.
Master : Laurent PUJO-MENJOUET, EDP et modélisation, 30h, M1, INSA Lyon.
Master : Laurent PUJO-MENJOUET, Projets tutorés, 3h, M1, UCBL Lyon.
Master : Laurent PUJO-MENJOUET, Systèmes dynamiques, 27h, M1, UCBL Lyon.
Master : Laurent PUJO-MENJOUET, EDP et Structures biologiques, 18h, M2, UCBL Lyon.
Master : Laurent PUJO-MENJOUET, EDP pour l'hématopoïèse, 18h, M2, UCBL Lyon.
Master : Romain YVINEC, Equations de transport en biologie, 12h, M2, UCBL Lyon.
Master : Philippe MICHEL, Algorithmes pour la décision en entreprise, 16h, M2, ECL Lyon.
Master : Philippe MICHEL, Mathématiques appliquées à la biologie, 20h, M1, ECL Lyon.
Master : Philippe MICHEL, Systèmes embarqués collaboratifs, 12h, M1, ECL Lyon.
Master : Philippe MICHEL, Projet Application - Recherche, 10h, M1, ECL Lyon.

9.2.2. Supervision

PhD : Erwan Hingant, Contributions à la modélisation mathématique et numérique de problèmes issus de la biologie - Applications aux Prions et à la maladie d'Alzheimer, Université Claude Bernard, Lyon 1, September 17th 2012, co-advised by Ionel Sorin Ciuperca and Laurent Pujou-Menjouet.

PhD : Emmanuelle Terry, Modélisation mathématique des dynamiques de la réponse immunitaire T CD8, aux échelles cellulaire et moléculaire, Université Claude Bernard, Lyon 1, October 12th 2012, co-advised by Fabien CRAUSTE and Olivier GANDRILLON.

PhD : Romain Yvinec, Modélisation probabiliste en biologie moléculaire et cellulaire, Université Claude Bernard, Lyon 1, October 05th 2012, co-advised by Mostafa Adimy and Laurent Pujou-Menjouet.

PhD : Latifa Bouguerra, University of Alger, Algerian government scholarship, started October 2012, co-advised by Mostafa Adimy and Rachid Boudchich.

PhD : Youssef Bourfia, University of Marrakech, IRD grant, started October 2010, co-advised by Mostafa Adimy and Hassan Hbid.

PhD : Abdennasser Chekroun, ICJ UMR 5208, Lyon 1, Algerian government scholarship, started October 2012, advised by Mostafa Adimy.

PhD : Raouf El Cheikh, ICJ UMR 5208, Lyon 1, salarié, started October 2011, advised by Samuel Bernard.

PhD : Nathalie Eymard, ICJ UMR 5208, Lyon 1, salariée, started October 2009, advised by Vitaly Volpert.

PhD : Mohamed Helal, University of Sidi Bel Abbes, Algeria, Algerian government scholarship, started October 2011, co-advised by Laurent Pujou-Menjouet and Abdelkader Lakmeche.

PhD : Marine Jacquier, ICJ UMR 5208, Lyon 1, started October 2012, co-advised by Mostafa Adimy and Fabien Crauste.

PhD : Lila Sebaa, University of Alger, Algerian government scholarship, started October 2009, co-advised by Mostafa Adimy and Rachid Boudchich.

PhD : Alen Tosenberger, ICJ UMR 5208, Lyon 1, advised by Vitaly Volpert.

9.3. Popularization

Thomas Lepoutre is a member of the website Images des Mathématiques (see, <http://www.cmap.polytechnique.fr/~ecolemathbio2012/index.php>), reviewing press articles concerning mathematics. He also participated to the programm MathaLyon, spending one day in Collège de l'Isle à Vienne (38), animating Mathematical stands for students.

IBIS Project-Team

8. Dissemination

8.1. Editorial, animation, and reviewing activities

Guillaume Baptist

Type	Journal, conference, agency
Editor	French-language web site on synthetic biology, theoretical biology, and philosophy, http://www.cellule-et-futur.fr

Eugenio Cinquemani

Type	Journal, conference, agency
Associate Editor	European Control Conference (ECC) 2012

Hidde de Jong

Type	Journal, conference, agency
Member Editorial Board Member Editorial Board	Journal of Mathematical Biology ACM/IEEE Transactions on Computational Biology and Bioinformatics
Member Editorial Board Member Program Committee	Biosystems CMSB 12, DKRC 12, ECCB 12, IEEE BIBM 12, JOBIM 12, PAIS 12, QR 12
Member Scientific Advisory Board Member Review Committee President Recruitment Committee Member PhD Committee Member PhD Advisory Committee	Microbiology and Food Chain Department, INRA International Human Frontier Science Program (HFSP) Assistant-professor ENS, Paris, department of Biology Sara Berthoumieux (Université Joseph Fourier) Matthieu Trauchessec (CEA/Metabolic Explorer and Université Joseph Fourier), Caroline Baroukh (Inria/INRA and Université de Montpellier 2)
Coordinator (with C. Ambroise and F. Molina)	Working group on Transcriptome, protéome, modélisation, inférence et analyse des réseaux biologiques of GDR CNRS 3003 Bioinformatique moléculaire
Advisor Project reviews	Grenoble team for iGEM 2012 competition ANR, Région Aquitaine, FRS, CNRS, Technical University Munich, NWO

Johannes Geiselmann

Type	Journal, conference, agency
Member Recruitment Committee Member Recruitment Committee Member PhD Committee	Professor in bioinformatics, INSA Lyon Assistant-professor, Université Joseph Fourier John Lalith (ENS Lyon), Axelle Dawidas (Université Joseph Fourier), Sara Berthoumieux (Université Joseph Fourier), Guillaume Baptist (Université Joseph Fourier), Jérôme Izard (Université Joseph Fourier)
Member PhD Advisory Committee	Khady Sall (CEA and Université Joseph Fourier), Xuejiao Jiang (Université Claude Bernard, Lyon)
Advisor	Grenoble team for iGEM 2012 competition

Stéphane Pinhal

Type	Journal, conference, agency
Advisor	Grenoble team for iGEM 2012 competition

Delphine Ropers

Type	Journal, conference, agency
Member Recruitment Committee Member Organization Committee Member PhD Committee Member PhD Advisory Committee Advisor Project reviews	Ingénieur de recherche INRA SeMoVi (Séminaire de Modélisation du Vivant) Jérôme Izard (Université Joseph Fourier) Claire Villiers (Université Joseph Fourier) Grenoble team for iGEM 2012 competition CNRS

Valentin Zulkower

Type	Journal, conference, agency
Advisor	Grenoble team for iGEM 2012 competition

8.2. Other administrative activities

Eugenio Cinquemani is member of the Comité des Utilisateurs des Moyens Informatiques (CUMI) and of the Commission des Emplois Scientifiques at Inria Grenoble - Rhône-Alpes.

Hidde de Jong is local representative of the Department of International Relations of Inria at the Grenoble - Rhône-Alpes research center. He is also member of the working group on International Relations of the Conseil d'Orientation Scientifique et Technique (COST) of Inria.

Johannes Geiselmann is head of the Control of Gene Expression group in the Laboratoire Adaptation et Pathogénie des Microorganismes (UMR 5163) and director of the laboratory.

Yves Markowicz is director of the BSc department at Université Joseph Fourier.

François Rechenmann is leader of the editorial committee of the Interstices website (<http://interstices.info>).

François Rechenmann has been commissioned by the Director of Inria Grenoble - Rhône-Alpes to help and to coach PhD students, in the research center, who encounter problems of various sorts during their thesis.

Delphine Ropers represents Inria Grenoble - Rhône-Alpes in the scientific board of IXXI, the Complex Systems Institute in Lyon (<http://www.ixxi.fr>). She is also member of the Commission de Formation Permanente at Inria Grenoble - Rhône-Alpes.

Diana Stefan is a representative of the PhD candidates within the committees of the Doctoral School MSTII in Grenoble.

8.3. Seminars, presentations, and PhD thesis defenses

Guillaume Baptist

Title	Event and location	Date
Les réseaux de régulation chez la bactérie Escherichia coli	PhD thesis defense, Université Joseph Fourier	Aug. 2012

Sara Berthoumieux

Title	Event and location	Date
Methods for identification of biochemical network models	PhD thesis defense, Université Claude Bernard, Lyon	Jun. 2012

Eugenio Cinquemani

Title	Event and location	Date
Identifiability and identification of dynamic models of biochemical regulatory networks	INRIabcd seminar, Inria Grenoble - Rhône-Alpes, Villeurbanne	Feb. 2012
Structural and practical identifiability of approximate metabolic network models	16th IFAC symposium on System Identification (SYSID), Brussels (Belgium)	Jul. 2012

Hidde de Jong

Title	Event and location	Date
Piecewise-linear modeling of gene regulatory networks	Invited talk at Workshop on Structural Dynamical Systems (SDS-12), Monopoli (Italy)	Jun. 2012
Shared control of gene expression in bacteria by transcription factors and global physiological state	Invited talk at Workshop on design, optimization and control in systems and synthetic biology, Paris	Jun. 2012
Modeling of gene regulatory networks	ICGEB Course on Advances in bioinformatics tools for the analysis of high-throughput omics data, Santiago (Chili)	Jul. 2012
Identification of metabolic network models from high-throughput data sets	Invited talk at Workshop on Statistical and dynamical models in biology and medicine, Stuttgart	Oct. 2012
Shared control of gene expression in bacteria by transcription factors and global physiological state	Invited talk at Journées Microbiologistes de l'INRA, Avignon	Nov. 2012
Integration of high-throughput datasets through dynamical modeling of regulatory networks	Tutorial at PROSPECTOM Workshop, Grenoble	Nov. 2012
Modélisation mathématique des réseaux de régulation génique	Closing conference of séminaire interacadémique des inspecteurs généraux et régionaux de mathématiques, Grenoble	Nov. 2012

Johannes Geiselmann

Title	Event and location	Date
Systems biology of Escherichia coli	Seminar at Université Claude Bernard, Lyon	Feb. 2012
The carbon catabolite repression network of Escherichia coli	Conference on Microbial Systems Biology, Taipei (Taiwan)	May 2012

Jérôme Izard

Title	Event and location	Date
Growth control and gene regulation in Escherichia coli	PhD thesis defense, Université Joseph Fourier	Dec. 2012

Delphine Ropers

Title	Event and location	Date
Modeling the gene expression machinery in Escherichia coli Complex regulatory networks in bacteria: How bacteria face the unexpected	Séminaire de Modélisation du Vivant (SeMoVi), Inria Grenoble - Rhône-Alpes	Apr. 2012
	Ecole de Systèmes Complexes, Rennes	Oct. 2012

Diana Stefan

Title	Event and location	Date
Structural and parametric identification of bacterial regulatory networks A case study on the gene network regulating motility in E. coli	Poster presentation at journée scientifique de l'ARC6	Nov. 2012

8.4. Popular science writing

The members of IBIS are actively involved in the dissemination of research results in systems biology and bioinformatics to a wider, non-specialist audience. François Rechenmann is leader of the editorial committee of the Interstices (<http://interstices.info>). Interstices offers pedagogic presentations of research themes and activities in the computer science domain, including at its interface with life sciences.

In the context of the **Math C2+ initiative** for high-school students, François Rechenmann has led two sessions of a workshop introducing the notion of algorithm. The objective set to the students was to design an algorithm for sorting a stack of objects, such as pancakes, according to their size and through only one type of swapping operation (see <http://interstices.info/algo-crepes> for the presentation of the algorithm).

8.5. Teaching

Four members of the IBIS team are either full professor, associate professor or assistant professor at the Université Joseph Fourier or the Université Pierre Mendès-France in Grenoble. They therefore have a full teaching service (at least 192 hours per year) and administrative duties related to the organization and evaluation of the university course programs on all levels (from BSc to PhD). Besides the full-time academic staff in IBIS, the following people have contributed to courses last year.

Eugenio Cinquemani

Subject	Year	Location	Hours
Identification of dynamical models of genetic networks	5	INSA de Lyon	4

Hidde de Jong

Subject	Year	Location	Hours
Modeling and simulation of genetic regulatory networks	5	INSA de Lyon	16
Modeling and simulation of genetic regulatory networks	5	ENS, Paris	8

Delphine Ropers

Subject	Year	Location	Hours
Modeling and simulation of genetic regulatory networks	4	Université Joseph Fourier	7.5
Modeling and simulation of genetic regulatory networks	5	INSA de Toulouse	4

Diana Stefan

Subject	Year	Location	Hours
Automatique et traitement du signal	2	INPG Phelma	32

Valentin Zulkower

Subject	Year	Location	Hours
Mathématiques générales (algèbre, géométrie, ...)	1	Université de Grenoble	45
Mathématiques générales (analyse, séries de Fourier, calcul matriciel)	1	Polytech Grenoble	90

Hidde de Jong organized with Daniel Kahn a module on the modeling of genetic and metabolic networks at INSA de Lyon.

MOISE Project-Team

9. Dissemination

9.1. Scientific Animation

- E. Blayo has organized, with M. Bocquet (EPI CLIME) and E. Cosme (LEGI, Grenoble), a 3-week international summer school on Advanced Data Assimilation for Geosciences. Les Houches, May 28 - June 15, 55 participants from more than 20 countries <http://houches2012.gforge.inria.fr>
- E. Blayo is one of the organizers of the 4th National Conference on Data Assimilation. Nice, December 17-19, 2012. http://sama.ipsl.jussieu.fr/Fr/events/workshops/2012_12_17_CNA2012.html
- L. Debreu and E. Blayo have organized, with the Inria Valorization service, a one-day In'Tech seminar "Atmosphere and meteorological forecast: new tools, new usages". <http://www.inria.fr/centre/grenoble/agenda/seminaire-in-tech-atmosphere-et-previsions-meteorologiques>
- Since 2010, Ch. Kazantsev is the Director of the IREM of Grenoble <http://www-irem.ujf-grenoble.fr/irem/accueil/>. The Institute is under rapid development now, joining about 25 teachers of secondary schools of the Grenoble region and 15 university professors. They work together 16 times a year on the development of the teaching strategy for the educational community. In addition to this, IREM is the editor of two journals: "Grand N" destined to primary schools teachers and "Petit x" – to the secondary schools.
- A. Rousseau is member of the editorial board of *Discrete and Continuous Dynamical Systems - Series S* (DCDS-S).
- N.Papadakis is a Co-Organisator of the "Journées Bordelaises d'Analyse Mathématique des Images". November, 12-14, 2012 <http://www.math.u-bordeaux1.fr/~jaujol/conf2012/JBAMI2012.html>,
- C. Prieur is in the scientific committee of the SAMO 2013 conference which will be held in Nice in July 2013, jointly with MASCOT NUM annual conference.
- C. Prieur was in the scientific committee of the Journées MAS 2013 (SMAI) which were held in Clermont-Ferrand in August 2012.
- C. Prieur and L. Viry are organizing jointly with H. Monod and R. Faivre (INRA) a school on sensitivity analysis for environmental models (les Houches, 7-12 April, 2013).
- C. Prieur is member of the board of the group mathematical statistics of the French society of statistics (SFdS).
- C. Prieur organized a session on sensitivity analysis in the Journées MAS (SMAI) 2013.
- C. Prieur organized a mini-symposium on sensitivity analysis for correlated inputs in the SIAM conference on uncertainty quantifications in Raileigh in April 2012.
- L. Debreu organized a one-day meeting on numerical kernels of ocean and atmospheric models, Paris, October 18, 2012.
- L. Debreu organized a three day tutorial on the use of realistic of ocean and atmospheric models at the 11th African conference on research in Computer Science and Applied Mathematics (CARI), Algiers, October 9-11, 2012.
- B.Lemieux gave a seminar at LSCE (Saclay) to present the DatIce tool http://www.lsce.ipsl.fr/Phocsea/Vie_des_labos/Seminaires/index.php?y=2012&id=206.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence: M. Nodet: Statistiques, 80h, L2, Université de Grenoble, France

Master: M. Nodet: Inverse Methods, 28h, M2, Université de Grenoble, France
Licence: E. Blayo: Mathematics for engineers, 72h, L1, university of Grenoble, France
Master : E. Blayo: Finite element methods, 45h, M1, university of Grenoble, France
Master : E. Blayo: Coupling methods for PDEs, 27h, M2, university of Grenoble, France
Master: E. Blayo: Data assimilation in oceanography, 2h, M2, Ecole des ponts Paris Tech, France
Master: A. Rousseau: Modèles mathématiques spatialisés pour les sciences de l'environnement, 12h, niveau M2, Université de Montpellier 2, France
Master: L. Debreu: Numerical Modelling for coastal oceanography, 18H, M2, Brest University, France.
Doctorat: E. Blayo: Introduction to data assimilation, 16h, university of Grenoble, France
Doctorat: A. Vidard: "Data Assimilation, an introduction", 8h, Université de Grenoble

9.2.2. Internships

Alexis Jacq and Marie Leturcq did internships for their L3 and M1 degrees, they both worked with M. Nodet and B. Bonan about data assimilation for glaciology.
Sébastien Barbier, M2R Internship (6 months), Modélisation de stratégies de dépollution d'une ressource hydrique en milieu naturel advised by A. Rousseau.
Jean-Philippe Bernard, M2R Internship (6 months), Développement et implémentation de modèles couplant descriptions fluides et biologiques pour les écosystèmes côtiers advised by A. Rousseau.
Alexandre Hoffmann, L3 internship, he worked with V. Chabot, A. Vidard and M. Nodet about interpolation methods for image assimilation.

9.2.3. Supervision

HdR : Arthur Vidard, "Assimilation de données et méthodes adjointes pour la géophysique", Université de Grenoble, 13/12/2012
PhD : Jean-Yves Tissot, Sur la décomposition ANOVA et l'estimation des indices de Sobol'. Application à un modèle d'écosystème marin., UJF, 16 novembre 2012, Clémentine Prieur et Eric Blayo
PhD : David ChereL, Décomposition de domaine pour des systèmes issus des équations de Navier-Stokes, UJF, 12 décembre 2012, Eric Blayo et Antoine Rousseau
PhD : Alexandre Janon, Analyse de sensibilité et réduction de dimension. Application à l'océanographie, Université de Grenoble, 15 novembre 2012, C. Prieur and M. Nodet
PhD in progress : Manel Tayachi, Couplages de modèles hydrologiques et océanographiques, 01/05/2010, E. Blayo & A. Rousseau
PhD in progress : Bertrand Bonan, Assimilation de données pour des modèles de calotte polaire, Université de Grenoble, M. Nodet and C. Ritz
PhD in progress : Pierre-Antoine Bouttier, Variational data assimilation into highly nonlinear ocean models, October 2009, E. Blayo and J. Verron
PhD in progress : Manel Tayachi, Couplages de modèles hydrologiques et océanographiques, 01/05/2010, E. Blayo & A. Rousseau
PhD in progress : Laurent Violeau (EPI TOSCA), Stochastic Lagrangian Models and Applications to Downscaling in Fluid Dynamics, 01/10/2010, M. Bossy (EPI TOSCA, Inria Sophia) & A. Rousseau
PhD in progress : Vincent Chabot, "Assimilation de données pour l'estimation de structures 2D et 3D dans des séquences d'images", started the 23rd of October 2010, Maëlle Nodet and Arthur Vidard supervisors.

9.2.4. Juries

- E. Blayo was a referee of PhD thesis of Pierre Allain: Analyse et synthèse de mouvements de foules par contrôle optimal.. Université de Bretagne Sud, January 27, 2012
- E. Blayo was a member of the jury for the PhD defense of Dorothée Robert: Caractérisation et modélisation de la dynamique de l'évapotranspiration en Afrique soudanienne en zone de socle : interaction entre les aquifères et la végétation. Université de Grenoble, August 30, 2012.
- E. Blayo was a member of the jury for the HDR defense of Arthur Vidard: Assimilation de données et méthodes adjointes pour la géophysique. Université de Grenoble, December 13, 2012.
- A. Rousseau was a member of the Inria Board for Research Positions 2012 (6 juniors and 2 seniors researchers).
- A. Rousseau is a member of Inria Evaluation Committee
- A. Rousseau participated in a career fair at MIT with M. Thonnat (Deputy Scientific Director at Inria), A. Theis-Viémont and E. Chareyre (Human Resources at Inria). The European Career Fair is an annual recruiting event, organized by the MIT European Club, that connects employers from Europe with the most talented candidates that live in the US.
- M. Nodet is a member of the Jury Agregation Externe de Mathématiques
- C. Prieur was a referee of the PhD jury of Sylvain Girard, Mines Paris Tech December,17, 2012
- C. Prieur was the president of the PhD jury of Yann Caniou, Université de Clermont-Ferrand. November,29, 2012
- C. Prieur was a referee of the PhD jury of Catalina Ciric, Université Lyon 1. September, 6, 2012
- C. Prieur was the president of the HdR jury of S. Gadat, Université de Toulouse. November, 22, 2012
- C. Helbert was a referee of the PhD jury of Jean-Yves Tissot, Université de Grenoble. November, 16, 2012

9.3. Popularization

- In the context of the Mathc2+ program, E. Blayo has given a conference "Applied maths: mathematics for the society and its environment". Grenoble, June 19, 2012.
- In the context of the program "100 parrains-100 classes", Ch. Kazantsev gives a weekly lectures to pupils of one secondary school in Grenoble.
- Ch.Kazantsev has participated in the "Fête de sciences" presenting the activities of the IREM of Grenoble.
- A. Rousseau gave a lecture to the first National Conference of Mathematics Popularization in Orléans, <http://www.animath.fr/conf/conferences.php>.
- A. Rousseau is a member of the french executive board of "Mathématiques pour la planète Terre 2013", <http://www.mpt2013.fr>.
- A. Rousseau gave 5 short interviews on France Inter (national radio), <http://www.franceinter.fr/player/reecouter?play=475445>, <http://www.franceinter.fr/player/reecouter?play=477677>, <http://www.franceinter.fr/player/reecouter?play=478643>, <http://www.franceinter.fr/player/reecouter?play=479435>, <http://www.franceinter.fr/player/reecouter?play=480603>.
- M. Nodet and A. Rousseau (with S. Minjeaud, CNRS Nice) published a popularization paper on basic principles in oceanography : <http://interstices.info/circulation-oceanique>
- E. Kazantsev has given a conference "Geophysical Hydrodynamics for dummies and for all others" at the meeting of professors of secondary schools of the Grenoble region organized by IREM of Grenoble <http://www-irem.ujf-grenoble.fr/irem/accueil/>

NUMED Project-Team

9. Dissemination

9.1. Scientific Animation

Vincent Calvez organizes mathematical researches visit and talks to high schools students.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

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

Master : Enseignant, titre du cours, nombre d'heures en équivalent TD, niveau (M1, M2), université, pays

Doctorat : Enseignant, titre du cours, nombre d'heures en équivalent TD, université, pays

9.2.2. Supervision

PhD & HdR :

PhD : Floriane Lignet, Etude de modèles mathématiques de l'angiogenèse, Université de Lyon, novembre 2012, E. Grenier and B. Ribba.

PhD in progress : Pauline Mazzocco, Modèles mathématiques de survie, 2012, B. Ribba

9.2.3. Juries

E. Grenier has taken part to different PhD juries.

9.3. Popularization

Paul Vigneaux is in the editorial board of the vulgarization website "Image des Maths".

STEEP Exploratory Action

9. Dissemination

9.1. Scientific Animation

- E. Prados is member of the scientific and technical Committee of the GIS (Groupement d'intérêt scientifique) Modélisation urbaine since January 2012.
- E. Prados has been member of the steering committee of the FRB (Fondation pour la Recherche sur la Biodiversité) program modelling and scenarios for the biodiversity from June 2010 to June 2012.
- P.-Y. Longaretti manages the informal SOCLE³ group. This group brings together researchers from various fields of expertise in exact, environmental and social sciences, with the objective to coordinate their respective research programs on the question of sustainability transition at local scales.
- P. Sturm has been Program Chair of RFIA 2012 – Congrès de Reconnaissance des Formes et Intelligence Artificielle, Lyon, France
- P. Sturm has been Area Chair of ECCV 2012 – European Conference on Computer Vision, Florence, Italy
- P. Sturm has been Area Chair of ICPR 2012 – International Conference on Pattern Recognition, Tsukuba, Japan
- P. Sturm is Associate Editor of IEEE Transactions on Pattern Analysis and Machine Intelligence, Journal of Mathematical Imaging and Vision, and Image and Vision Computing Journal.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- E. Arnaud, Introduction to applied math, 16,5h, L1, Université de Grenoble, France
- E. Arnaud, Statistics, 18h, L1, Université de Grenoble, France
- E. Arnaud, Image project, 22h, M1, Université de Grenoble, France
- E. Arnaud, Introduction to image analysis, 10h, M1, Université de Grenoble, France
- E. Arnaud, Computer vision, 39h, M2, Université de Grenoble, France
- E. Arnaud, Multimedia indexing, 24h, M2, Université de Grenoble, France
- E. Arnaud, Supervising of apprentices, 15h, Université de Grenoble, France
- P. Sturm, Informatique visuelle, 37.5h, M2, Université de Grenoble, France
- P. Sturm, Computer vision, 13.5h, M2, Université de Grenoble, France

9.2.2. Supervision

HdR: Emmanuel Prados, Recherches en reconstruction 3D photométrique [2], Université Joseph-Fourier – Grenoble 1, 04/04/2012

PhD: Visesh Chari, Shape Estimation for Specular Surfaces [1], Université de Grenoble, 20/11/2012

PhD in progress:

- Anthony Tschirhard, Calibration and sensitivity analysis of a micro-simulation LUTI model, Oct 2012, E. Prados, E. Arnaud, P. Sturm
- Julien Alapetite, part-time PhD student who carries out part of his work in STEEP, graduation expected in 2013, advisor Denis Dupré (CERAG).

9.2.3. Juries

- E. Arnaud has been member of one recruitment committee of a assistant professorships (Grenoble).
- P. Sturm has been reviewer of six and examiner of two PhD theses outside Grenoble.
- P. Sturm has been member of two professorship recruitment committees (Clermont-Ferrand and Evry).

9.3. Popularization

- P.-Y. Longaretti has given four conferences on Environmental Impact and Human Development for a general audience in the last two years.
- P.-Y. Longaretti has coordinated the translation team of the latest book of the American agro-economist Lester Brown, “World on the Edge” (French title: Basculement).

AVALON Team

8. Dissemination

8.1. Scientific Animation

Eddy Caron

- Program Committee Membership (international conferences and workshops): SOAC 2012 (International Workshop on Service-Oriented Architecture and Cloud Computing within ICACCI2013), Cloud & Grid2012 (The 2012 International Workshop on Cloud and Grid Interoperability (Cloud&Grid 2012)), CLOSER 2012 (2nd International Conference on Cloud Computing and Services Science), HCW 2012 (21st International Heterogeneity in Computing Workshop in conjunction with IPDPS 2012), SC12 Tutorials
- Program Committee Membership (national conferences and workshops): Realis (Reproductibilité expérimentale pour l'informatique en parallélisme, architecture et système – 1ère édition within ComPAS'2013)

Frédéric Desprez

- Program Committee Membership (international conferences and workshops): BDMC (1st Workshop on Big Data Management in Clouds held in conjunction with the EuroPar 2012 conference), Federatedclouds (Workshop on Cloud Services and the 8th Open Cirrus Summit), CGWS'2012 within EuroPAR, CLOSER 2012 (2nd International Conference on Cloud Computing and Services Science), ICA CON 2012 (1st International Conference of the IBM Cloud Academy), CCGRID 2012 (12th IEEE International Symposium on Cluster, Cloud and Grid Computing), HPGC 2012 (FTRA International Workshop on Human centric computing, P2P, Grid and Cloud computing), VTDC Workshop (5th International Workshop on Virtualization Technologies in Distributed Computing (within HPDC 2012)), LaSCoG'2012 (8th Workshop on Large Scale Computations on Grids), 3PGCIC (7th International Conference on P2P, Parallel, Grid, Cloud, and Internet Computing, Victoria, Canada, Nov.2012), ICPADS 2012 (18th IEEE International Conference on Parallel and Distributed Systems), CFSE (Conférence Française en Systèmes d'Exploitation), CloudCom 2012 (Services and Applications track of IEEE CloudCom 2012), Grid'12 (The 13th ACM/IEEE International Conference on Grid Computing)
- Program Committee Membership (national conferences and workshops): CFSE (Conférence Française en Systèmes d'Exploitation)

Gilles Fedak

- Publicity Chair 13th IEEE/ACM International Conference on Grid Computing Grid'12, Beijing, China, 2012
- Co-chair Third International Workshop on the MapReduce Programming Model and its Application (MapReduce 2012), in conjunction with HPDC'12, Delft, Netherlands, 2012
- Program Committee Membership: 13th IEEE/ACM International Conference on Grid Computing (Grid'12), ACM Symposium on High-Performance Parallel and Distributed Computing (HPDC'2012), International Conference on Computer Communication Networks (ICCCN), track on Grid and Cloud Computing (GCC), 8th IEEE International Conference on eScience (eScience 2012), 4th IEEE International Conference on Cloud Computing Technology and Science (CloudCom 2012), 12th IEEE International Conference on Scalable Computing and Communications (ScalCom-12), 20th EuroMicro International Conference on Parallel, Distributed and Network-Based Processing (PDP'12),

Jean-Patrick Gelas

- Reviewing committee: CCGrid2012
- University committee: Master (M2 CCI) jury

Olivier Glück

- Reviewing committee: CCGrid2012
- University committee: Member of the CEVU (Conseil des Etudes et de la Vie Universitaire) of University Lyon 1, Member of the UFR Faculté des Sciences et Technologies faculty council of University Lyon 1, Member of the computer science department council of University Lyon 1

Laurent Lefevre

- Program Vice-Chair of the track "Cluster, Grid and Cloud Computing" in the The 12th IEEE International Conference on Scalable Computing and Communications (ScalCom 2012), Changzhou, China, December 17-20, 2012
- Program Chair of the The IEEE International Conference on Green Computing and Communications (GreenCom 2012) , Besancon, France, November 20-23, 2012
- Co-organizer of Entretiens Jacques Cartier : Colloquium on "Towards ecological and energy efficient Information and Communication Technology - Vers des Technologies de l'Information écologiques et efficaces en consommation énergétique", Lyon, France, November 19-20, 2012
- Co-Organization of Inria Booth in SuperComputing 2012, Salt Lake City, USA, November 10-16, 2012
- Co PC Chair of Cloud&Grid 2012 : The Second International Workshop on Cloud and Grid Interoperability, Gwangju, Korea, 6-8 September 2012
- Co PC Chair of the 14th IEEE International Conference on High Performance Computing and Communications (HPCC-2012), Liverpool, UK, 25-27 June, 2012
- Steering Committee Member of : IEEE TCSC Technical Area in Green Computing, CCGrid 2012 : 12th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing
- Program Committee Member of the following international conferences : The 6th International Conference on Network and System Security (NSS 2012), 5th IEEE/ACM International Conference on Utility and Cloud Computing (UCC 2012), Third International Conference on Energy-Aware High Performance Computing, ICT-GLOW 2012: 2nd International Conference on ICT as Key Technology for the Fight against Global Warming, HP-PAC2012: The Eight Workshop on High-Performance, Power-Aware Computing, CCGrid 2012 : 12th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing, E-Energy 2012 : the third International Conference on Future Energy System, PMAM 2012 : The 2012 International Workshop on Programming Models and Applications for Multicores and Manycores, The 10th Australasian Symposium on Parallel and Distributed Computing (AusPDC2012)
- Program Committee Member of the following national conference : NOTERE / CFIP : Nouvelles technologies de la répartition / Colloque francophone sur l'ingénierie des protocoles,

Christian Pérez

- Program Committee Membership: 20th High Performance Computing Symposium (HPC 2012), 10th International Conference on Service Oriented Computing (ICSOC 2012), Conference for Young Scientists "Facing the Multicore-Challenge III".
- Reviewer for the 12th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2012), 5th International Conference on Cloud Computing (IEEE Cloud 2012).

Frédéric Suter

- Program Committee Membership (international conferences and workshops): CLOSER 2012 (2nd International Conference on Cloud Computing and Services Science), VTDC Workshop (5th International Workshop on Virtualization Technologies in Distributed Computing (within HPDC 2012)), LaSCoG'2012 (8th Workshop on Large Scale Computations on Grids), Vecpar 2012 (10th International Meeting on High-Performance Computing for Computational Science), MAPREDUCE2012 (Third International Workshop on MapReduce and its Applications).
- Program Committee Membership (national conferences and workshops): Realis (Reproductibilité expérimentale pour l'informatique en parallélisme, architecture et système – 1ère édition within ComPAS'2013)

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Master: Eddy Caron, Grid and Cloud Computing, 14 hours, M2, ENS Lyon, France

Master: Eddy Caron, Distributed System, 39 hours, M1, ENS Lyon, France

Master: Eddy Caron, Engineering Software, 39 hours, M1, ENS Lyon, France

Master: Eddy Caron, Grids, 8 hours, M2 RTS, INSA, France

Master: Frédéric Desprez, Parallel Computing, 30h, M1, Université Lyon 1, France

Master : Jean-Patrick Gelas, Réseaux avancés : IPv6 and IP routing, 40h, niveau M2, Université Lyon 1, France

Master : Jean-Patrick Gelas, Architecture des réseaux : Router under the hood, 6h, niveau M2, Université Lyon 1, France

Master : Jean-Patrick Gelas, Systèmes d'exploitation, 24h, niveau M2, Université Lyon 1, France

Master : Jean-Patrick Gelas, Réseaux, 35h, niveau M2, Université Lyon 1, France

Master : Jean-Patrick Gelas, Systèmes et logiciels embarqués, 45h, niveau M2, Université Lyon 1, France

Licence : Olivier Glück, Initiation Réseaux, 2x9h, niveau L2, Université Lyon 1, France

Licence : Olivier Glück, Réseaux, 2x70h, niveau L3, Université Lyon 1, France

Licence : Olivier Glück, Réseaux, 60h, niveau L3, Université des Sciences de Ho Chi Minh ville, Vietnam

Master : Olivier Glück, Services et Protocoles Avancés sur Internet, 40h, niveau M2, Université Lyon 1, France

Master : Olivier Glück, Administration des Systèmes et des Réseaux, 16h, niveau M2, Université Lyon 1, France

Master : Laurent Lefevre, Green Networking, 16h, M2, Ecole Normale Supérieure de Lyon, France

Master : Laurent Lefevre, Operating Systems, 39h, MASTER Informatique Spécialité Compétence Complémentaire en Informatique, Université Claude Bernard, Lyon1, France

Master : Christian Pérez, Grid and Cloud Computing, 14h, M2, Ecole Normale Supérieure de Lyon, France

8.2.2. Supervision

PhD & HdR

- Vincent Pichon, PhD defended October 5th, 2012, *Contribution à la conception à base de composants logiciels d'applications scientifiques parallèle*, André Ribes (EDF R&D, co-dir), C. Pérez (dir), [3].

- Cristian Klein, PhD defended November 29th, 2012, *Cooperative Resource Management for Parallel and Distributed Systems*, C. Pérez, [1].
- Adrian Muresan, PhD defended December 10th, 2012, *Scheduling and deployment of large-scale applications on Cloud platforms*, E. Caron (co-dir), F. Desprez (dir), [2].
- Mohammed Diouri , PhD in progress, *Performances and low energy consumption for distributed applications executed on exascale systems*, Oct. 1, 2010, I. Guérin Lassous (Dir.) and L. Lefèvre and O. Glück
- Maurice Djibril Faye, PhD in progress *Déploiement auto-adaptatif d'intergiciel sur plateforme élastique*, Eddy Caron (dir), Ousmane Thiaré (Université Gaston Berger, St Louis, Sénégal, co-dir)
- Sylvan Gault, PhD in progress, *Ordonnement de tâches avec le modèle MapReduce*, F. Suter (co-dir), F. Desprez (dir)
- Vincent Lanore, PhD in progress, *Adaptation et dynamique dans les modèles à composants logiciels pour les applications scientifiques*, C. Pérez.
- Arnaud Lefray , PhD in progress, *Mission fonctionnelle et de sécurité dans une informatique en nuage*, Eddy Caron (dir), Christian Toinard (ENSIB, co-dir)
- Anthony Simonet , PhD in progress, *Large scale data management in hybrid distributed computing infrastructures* G. Fedak
- Ghislain Tsafack Chetsa, PhD in progress, *Energy profile and green levers for applications and services over large scale and distributed infrastructures*, (2011-2014), L. Lefèvre (Dir.) and J.-M. Pierson (IRIT, co-dir.)
- Georges Markomanolis, PhD in progress, *Environnement de simulation pour l'aide au dimensionnement de grilles de calcul* , F. Suter (co-dir), F. Desprez (dir)

8.2.3. Juries

- Frédéric Desprez, HDR reviewer of Marc Baboulin, *Fast and reliable solutions for numerical linear algebra solvers in high-performance computing*, LRI, November 2012; PhD reviewer of Simplicio Donfack, *Methods and algorithms for solving linear systems of equations on massively parallel computers*, LRI, June 2012; of Rodrigue Chakode, *Environnement d'exécution pour des services de calcul à la demande sur des grappes mutualisées*, Grenoble, June 2012; of Lamiel Toch, *Contributions aux techniques d'ordonnements sur plates-formes parallèles ou distribuées*, Besançon, November 2012; of Yrjö Raivio, *Techno-Economic Analysis of Novel Opportunities for Mobile Networks – Open Innovation and Cloud Computing*, Helsinki, December 2012; PhD defense committee member of Xavier Etchevers, *Déploiement d'applications patrimoniales en environnements de type informatique dans le nuage*, Grenoble, December 2012.
- Gilles Fedak, PhD external reviewer of Ian Kelley, *Data Management in Dynamic Distributed Computing Environment* UK, November 2012
- Laurent Lefevre, PhD reviewer of Marco Guazzone *Power and Performance Management in Cloud Computing Systems*, University of Torino, Italy, February 2012
- Christian Pérez, PhD reviewer of Ahmed Turki, *Un modèle pour la composition d'applications de visualisation et d'interaction continue avec des simulations scientifiques*, University of Orleans, March 2012; of André Lage Freitas, *Autonomous Service Execution Driven by Service Level Agreements*, INSA Rennes, March 2012; of Javier Rojas Balderrama, *Gestion du cycle de vie de services déployés sur une infrastructure de calcul distribué en neuroinformatique*, University of Nice Sophia Antipolis, April 2012; of Jérôme Clet-Ortega, *Exploitation efficace des architectures parallèles de type grappes de NUMA à l'aide de modèles hybrides de programmation*, University of Bordeaux I, April 2012; of Héctor Fernández, *Flexible Coordination through the Chemical Metaphor for Services Infrastructure*, University of Rennes I, June 2012; of Mihai Alexandru, *Efficient large electromagnetic simulation based on hybrid TLM and modal approach on grid computing and supercomputer*, University of Toulouse, December 2012.

8.3. Popularization

Laurent Lefevre :

- Co-organizer of the Rencontres Inria Industrie : Sciences Numériques et efficacité énergétique - Numerical Sciences and energy efficiency, Inria Montbonnot, France, March 8, 2012
- Co-organizer of the Second Half day on “Public procurement of Energy efficient datacenters - Achats publics de datacentres efficaces du point de vue énergétique”, within the PrimeEnergyIt Project, with BIO Intelligence Service company, Paris, France, February, 10, 2012
- Co-organizer of the Green Days @ Lyon event: “Energy efficiency : how to monitor and impact on applications ?”, Lyon, France, January 19-20, 2012
- Member of “Comité de Pilotage” for the collaborative writing of a Ademe Book on “Guide Sectoriel 2012 : Réalisation d’un bilan des émissions de gaz à effet de serre”, 146 pages, January 2012
- “L’émergence du Green-IT, pour une informatique plus verte” : Article and Interview for 20 ans Inria Rhone Alpes, Laurent Lefevre and Bel Dumé, November 15, 2012
- “Le Green IT se réfugie au Nord !” : Brève Inria; “Le saviez-vous ?”, Laurent Lefevre and Christophe Castro, May 10, 2012
- Interview for the paper “Comment se chauffer avec les *data centers*”, Les Echos, April 2012

DANTE Team

9. Dissemination

9.1. Scientific Animation

- Eric Fleury is President of the expert committee for the ANR INFRA call
- Eric Fleury is Co-chair of the Networking group ResCom of the CNRS GDR ASR. He is also a member of the scientific committee of the GDR ASR.
- Eric Fleury is in the steering committee of the IXXI – Rhône-Alpes Complex Systems Institute.
- Eric Fleury has been an expert for the Fund for Scientific Research - FNRS.
- Eric Fleury was PC member of ASE/IEEE International Conference on Social Computing (Social-Com)
- Eric Fleury was PC member of 3rd Workshop on Complex Networks
- Thomas Begin was PC member of ACM International Symposium on Performance Evaluation of Wireless Ad Hoc, Sensor, and Ubiquitous Networks (PE-WASUN 2012).
- Thomas Begin was PC member of Nouvelles Technologies de la Répartition / Colloque Francophone sur l'Ingénierie des Protocoles (NOTERE/CFIP 2012).
- Paulo Gonçalves is officer of the local liaison board of EURASIP
- Paulo Gonçalves was PC member of the 3rd Workshop on High Speed Network and Computing Environments (SAINT 2012)
- Paulo Gonçalves is organiser of the 4th Workshop on High Speed Network and Computing Environments (COMPSAC 2013, Kyoto)
- Christophe Crespelle was co-chair of the Discrete Mathematics Session of the SMF-VMS Joint Congress of Mathematics, August 2012, Huê, Vietnam.
- Christophe Crespelle was co-organiser of the 14èmes Rencontres Francophones sur les Aspects Algorithmiques des Télécommunications (AlgoTel 2012).
- Isabelle Guérin Lassous was vice-chair of the expert committee for the ANR Blanc call
- Isabelle Guérin Lassous is a member of the National Committee - Section 06 of the CNRS
- Isabelle Guérin Lassous was general chair of the 9th ACM International Symposium on Performance Evaluation of Wireless Ad Hoc, Sensor, and Ubiquitous Networks (PE-WASUN 2012).
- Isabelle Guérin Lassous is PC member of international conferences as ITC 2013, IWCMC 2013, ICC 2013, MedHocNet 2013, IPDPS 2013, ICC 2012, Globecom 2012.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

9.2.1.1. Teaching by Eric Fleury

Eric Fleury is a professor at ENS Lyon in the Computer Science Department since 2007. Since 2009 he is the head of the **department of computer science**. **ENS de Lyon** is one of the four Écoles normales supérieures in France.

Licence : "Introduction to Algorithm" (L3), ENS de Lyon, France

Licence : "Architecture, System and Networking" (L3), ENS de Lyon, France

9.2.1.2. Teaching by Thomas Begin

Thomas Begin is an Assistant Professor at Université Claude Bernard Lyon 1 in the Computer Science since 2009. He mostly lectures at the University, though he has a teaching activity at ENS Lyon as well.

Licence : "Networks" (L3), University Lyon 1, France

Master : "Networking" (M1), University Lyon 1, France

Master : "Advanced Networks" (M2), University Lyon 1, France

Master : "Performance Evaluation of Green Networks" (M2), ENS de Lyon, France

9.2.1.3. Teaching by Paulo Gonçalves

Master : Responsible for the teaching axis "Models and Optimization for Emergent Infrastructure". M1/M2 of the Department of Computer Sciences at ENS Lyon (*Informatique fondamentale*)

Eng. school : "Introduction to Compressive Sensing" (5th year), CPE Lyon, France

9.2.1.4. Teaching by Christophe Crespelle

Christophe Crespelle is an Assistant Professor at Université Claude Bernard Lyon 1 (UCBL) in the Computer Science department since 2010. He mostly lectures at UCBL, though he has a teaching activity at ENS Lyon as well.

Licence : "Programming" (L2), UCBL, France

Master : "Network Security Architecture" (M2), UCBL, France

Master : "Security" (M2), UCBL, France

Master : "Future Networks" (M2), UCBL, France

Master : "Complex Networks" (M2), ENS Lyon, France

9.2.1.5. Teaching by Isabelle Guérin Lassous

Isabelle Guérin Lassous is an Professor at Université Claude Bernard Lyon 1 in the Computer Science since 2006. She mostly lectures at the University, though she has a teaching activity at ENS Lyon as well. Isabelle Guérin Lassous also heads the Networking speciality of the Master in computer science of University Lyon 1.

Master : "QoS and multimedia networking applications" (M2), University Lyon 1, France

Master : "Networking" (M2), University Lyon 1, France

Master : "Wireless Networks" (M2), University Lyon 1, France

Master : "Ad Hoc Networks" (M1), University Lyon 1, France

Master : "Network Algorithms" (M1), ENS de Lyon, France

9.2.2. Supervision

PhD : Adrien Friggeri, A Quantitative Theory of Social Cohesion, ENS de Lyon, August 2012, Éric Fleury & Guillaume Chelius

PhD : Qinna Wang, Overlapping community detection in dynamic networks , ENS de Lyon, April 2012, Éric Fleury

PhD : Doreid Ammar, Knowledge Plane for Semantic Networks: Application to Admission Control, University Lyon 1, December 2012, Isabelle Guérin-Lassous & Thomas Begin

PhD : Van Nam Nguyen, Evaluation and improvement of the bandwidth use in 802.11-based multihop wireless networks, University Lyon 1, December 2012, Isabelle Guérin-Lassous & Victor Moraru (IFI, Vietnam)

PhD : Andreea Chis, Méthodes et outils pour la compilation et l'optimisation logicielles des systèmes embarqués sans fils dédiés à des applications, ENS de Lyon, January 2012, Éric Fleury & Antoine Fraboulet

PhD in progress : Lucie Martinet, iBird: Individual Based Investigation of Resistance Dissemination, September 2011, Éric Fleury & Christophe Crespelle

PhD in progress : Benjamin Girault, Ondelettes et graphe d'interactions dynamique : échelle temporelle et spatiale, September 2012, Éric Fleury & Paulo Gonçalves

PhD in progress : Thiago Abreu, Integration of Traffic Awareness in Substitution Networks, March 2011, Isabelle Guérin-Lassous & Thomas Begin

PhD in progress : Roy Shubhabrata, Measurements in the framework of Virtual Networks Development, October 2010, Paulo Gonçalves & Thomas Begin

PhD in progress: Marina Sokol, Clustering and learning techniques for traffic / users classification, October 2010, Philippe Nain (Inria MAESTRO) and Paulo Gonçalves. M. Sokol has interrupted her PhD and his currently on maternity leave (until October 2013).

PhD in progress: Elie Rotenberg, Complex Network Metrology, September 2010, Matthieu Latapy and Christophe Crespelle

PhD in progress: Anh Tuan GIANG, Modeling and Improving the Capacity of Vehicular Ad hoc network, April 2011, Anthony Busson (registered at University Paris XI).

PhD in progress: Sabrina Naimi, Mobility metrics in wireless mobile networks, September 2010, Véronique Vèque and Anthony Busson (registered at University Paris XI).

9.2.3. Juries

- Eric Fleury was president of the HDR jury of Emmanuel Baccelli (UPMC, France).
- Eric Fleury was president of the Ph. D. jury of Mikaila Toko Worou (Université de Nice - Inria Sophia Antipolis, France).
- Eric Fleury was member of the Ph.D. jury and reviewer of DIANA Rémi (Université de Toulouse, France).
- Eric Fleury was member of the Ph.D. jury of Afshin Moin (Université de Rennes, France).
- Eric Fleury was member of the Ph.D. jury of Fabio Rocha-Jimenez-Vieira (UPMC, France).
- Eric Fleury was member of the Ph.D. jury of Thomas Ferrandiz (ISAE, France).
- Thomas Begin was member of the Ph.D. jury of El Hachemi Bendahmane (University of Grenoble, France).
- Paulo Gonçalves was member of the HDR jury of Sandrine Vatou (Telecom Bretagne, France).
- Paulo Gonçalves was member of the Ph.D. jury of Jérôme Van Zaen (EPFL, Switzerland).
- Christophe Crespelle was member of the Ph.D. jury of Massoud Seifi (UPMC, France).
- Isabelle Guérin Lassous was the member of the jury of the second competition of ENS Cachan.
- Isabelle Guérin Lassous was president of the HdR jury of Anne Fladenmuller (UPMC) and of the PhD juries of Bilel Romdhani (INSA Lyon) and Aruna Bianzino (Telecom ParisTech).
- Isabelle Guérin Lassous was reviewer of the PhD juries of Giorgio Corbellini (Grenoble), Mauricio Ituralde (Toulouse), Scott McKenzie Raynel (University of Waikato, New Zealand) and Bafing Sambou (Toulouse).

9.3. Popularization

Eric Fleury was the co-chair of the conference "[Alan Turing's Heritage](#)". This Turing Centenary Conference has been held in Lyon on July 2-4, 2012. At this occasion, a short movie [The Turing Machine Comes True](#) was released on the "Real Turing Machine" built from a [student team](#) from the Computer Science Department of ENS de Lyon. We do not mean to simulate a Turing machine as it is indeed very easy to simulate a Turing machine on a modern computer. The challenge was really to build a purely mechanical Turing's machine y using only LEGO bricks, gear, rod, pneumatic jack...

MESCAL Project-Team

9. Dissemination

9.1. Animation of the scientific community

- Brigitte Plateau is the president of Grenoble-INP.
- Yves Denneulin is the director of Grenoble-INP ENSIMAG.
- Corinne Touati is the Grenoble INP correspondent for international relations with Japan.
- Yves Denneulin and Jean-Marc Vincent are co-directors of the LICIA (Franco-Brazilian Laboratory).
- Bruno Gaujal has been a member of selection committees in Grenoble.

9.1.1. Invited Talks

- Bruno Gaujal gave an invited talk at *Piecewise Deterministic Markov Process Days*, Marne la Vallée, 2012. He was invited to give a series of lectures at the Workshop *Weak Kam Dynamics and mean field games and control*, Warwick Mathematics Dept., 2012. He was also invited to give a talk at the *Complex systems workshop*, Rescom, Paris, Nov. 2012.
- Bruno Gaujal and Corinne Touati are invited to give a one hour lecture each at the autumn school on *Analyse D'Algorithmes et Modèles Aléatoires (ADAMA)*, Monastir, October 2012 on game theory for networks.
- Panayotis Mertikopoulos was invited to give talks at ENSEA, Wireless Networks Seminar, March 2012, Ecole Polytechnique, Economic Theory Seminar, March 2012, Games and Strategy in Paris (International Conference for Sylvain Sorin's 60th birthday), June 2012, Paris Game Theory Seminar, May 2012, University of Athens, Wireless Systems Seminar, October 2012.
- Arnaud Legrand has given an invited talk at JLPC (Argonne), November 2012, at the workshop *New challenges in scheduling theory*, Frejus, Oct. 2012, and invited seminars at the PUC Rio and at UFRGDS, Brazil.

9.1.2. Journal, Conference and Workshop Organization

- Panayotis Mertikopoulos is the publications chair of Valuetools 2012 (the 6th International ICST Conference on Performance Evaluation Methodologies and Tools). He is also the co-organizer of the Paris Working Group on Evolutionary Games.
- Jean-Marc Vincent has been the general chair of the ASMTA conference, June 2012.
- Corinne Touati has been the general chair of ValueTools 2012, Cargese, Oct. 2012.
- Bruno Gaujal, Panayotis Mertikopoulos and Corinne Touati organized the Rescom summer school on Game Theory for networks, Vittel, June 2012.
- Panayotis Mertikopoulos was a publicity chair of the 11th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks.
- Arnaud Legrand has organized the *simgrid user days* in Lyon.

9.1.3. Program Committees

- Bruno Gaujal was the Technical Program Committee Chair of ValueTools 2012.
- Bruno Gaujal was program committee member of Wodes 2012.
- Panayotis Mertikopoulos was program committee member of ValueTools 2012.
- Arnaud Legrand was program committee member of IPDPS 2012.

9.1.4. Thesis Defense

- Marcio Bastos Castro, *Improving the Performance of Transactional Memory Applications on Multi-cores: A Machine Learning-based Approach*, Dec. 3, 2012.
- Kiril Geogiev, *Débogage des systèmes embarqués multiprocesseur basé sur la ré-exécution déterministe et partielle*, Dec. 4, 2012 [5].
- Slim Bouguerra, *Tolérance aux pannes dans des environnements de calcul parallèles et distribués: optimisation des stratégies de sauvegarde/reprise et ordonnancement*, Apr. 12, 2012 [4].

9.1.5. Thesis Committees

Members of the MESCAL project-team have served on the following PhD thesis committees

- Bruno Gaujal served on the thesis committees of Laurent Jouhet (president), Adrien Brandejsky (reviewer), Xavier Koegler (reviewer).

9.1.6. Popular Science

- MESCAL actively promotes science to young and non-scientific audience. This year, Corinne Touati participated to the "stage Maths C2+" and the bi-annual "semaine de l'ingénieur" to promote the use of mathematics to junior high and high school students in Rhône-Alpes.
- Jean-Marc Vincent contributed to the national initiative for introducing computer science to high school professors in mathematics.

9.2. Teaching

Several members of mescal are university professors and comply with their recurrent teaching duties. In addition, here are more details on new lectures that were initiated by MESCAL members in 2012.

- Performance evaluation. Two new lectures on system modeling and performance evaluation started in Ensimag in 2012 at M1 and M2 levels.
- Game Theory and Applications, 24 hours, M2R, ENS de Lyon, France.
- Stochastic System Optimisation, 36 hours, MPRI, Paris.
- "Research School" (open to M1, M2 and PhD students) on Game Theory for Networks, Rescom Summer School, Vittel, France.
- Olivier Richard was involved in the creation of a new "fab lab" in the University Joseph Fourier.
- Arnaud Legrand is responsible of the Parallel systems track at the MOSIG.

MOAIS Project-Team

9. Dissemination

9.1. Scientific Animation

ISSAC 2012 : Treasurer and Local Arrangements committee (the conference held in Grenoble in July 2012)

CompPAS/Renpar 2013 : Chair of the Program Committee for the next edition of CompPAS/Renpar that will be held at Grenoble in January 2013.

CompPAS/Renpar 2013 : local organization of CompPAS/Renpar.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master: V Danjean, T Gautier: course "Parallel Programming" (M2), Grenoble University,.

Master: J-L. Roch co-director (Grenoble-INP) with P Elbaz-Vincent (Université Joseph Fourier, Math. Dept) of the Master "SCCI Security, Cryptology and Coding of Information Systems" (M2) joined between UJF and INP Grenoble Universities. This Master, started in 2001, is taught in English from sept 2007 (international Master).

Master: C. Pernet and Denis Trystram are responsible of the first year (M1) of the international Master of Science in Informatics at Grenoble (MOSIG-M1).

Master: J-L. Roch, "Security models" 24h (M2), Grenoble University

Master: D. Trystram, P-F. Dutot, J.-L. Roch, "Complexity, approximation theory and randomization" master course (M2) at Grenoble University

Master: François Broquedis. 192 hours per year. 192 hours per year. Engineering school Grenoble-INP/Ensimag, 1st year/L3 and Master (M1/2nd year and M2/3rd year).

Master: Vincent Danjean. 242 hours per year. Licence (third year) and Master (first and second year) at Joseph Fourier University. First to third year of engineering school at Polytech' Grenoble.

Master: Pierre-François Dutot. 226 hours per year. Licence (first and second year) at IUT2/UPMF (Institut Universitaire Technologique de l'Université Pierre Mendès-France) and 9 hours Master M2R-ISC Informatique-Systèmes-Communication at Joseph Fourier University.

Master: Guillaume Huard. 242 hours per year. Licence (first and third year) and Master (first year) at Joseph Fourier University.

Master: Grégory Mounié. 242 hours per year. Master (first year) and Computer Science for Non Computer Scientist Post-Master at Engineering school ENSIMAG and Dept TELECOM, Grenoble-INP.

Master: Clement Pernet. 210 hours per year. University J. Fourier. Master (first year and second year) and Licence (3rd year).

Master: Bruno Raffin. 22 hours per year. Master at Université d'Orléans and Polytech'Grenoble.

Master: Jean-Louis Roch. 242 hours per year. Engineering school Grenoble-INP/Ensimag and Master (M1/2nd year and M2/3rd year)

Master: Denis Trystram. 200 hours per year in average, mainly at first level of Engineering School.

Master: Frédéric Wagner. 220 hours per year. Engineering school ENSIMAG, Grenoble-INP (M1/2nd year and M2/3rd year) (190h) ; Master DESS/M2-P SCCI Security (30h).

PLANETE Project-Team

9. Dissemination

9.1. Scientific Animation

Walid Dabbous served in the programme committees of NOMEN'2012, ICC'12 NGN and NoF'12. He is co-editor or a special issue of the PPNA journal on Experimental Evaluation of Peer-to-Peer Applications ([30]). He is member of the scientific council of the Inria Bell-Labs laboratory on Self Organizing Networks.

Claude Castelluccia served in the program committees of the following international conferences: ACM CCS 2012, ACM Wisec2012 and SESOC2012. He is the co-founder of the ACM WiSec (Wireless Security) conference.

Thierry Turetli Senior ACM and IEEE member, served in 2012 in the program committees of the following international conferences: 19th International Packet Video Workshop and 5th ACM Workshop on mobile Video Delivery (Movid). He is member of the Editorial Boards of the Journal of Mobile Communication, Computation and Information (WINET) published by Springer Science and of the Advances in Multimedia Journal published by Hindawi Publishing Corporation.

Chadi Barakat was the General Co-Chair of the ACM CoNEXT 2012 conference on emerging Networking EXperiments and Technologies that was held in Nice on Dec 10-13, 2012. In 2012, he served on the Technical Program Committee for the TMA 2013 workshop (Turin), the PAM 2013 conference (Hong-Kong), and the CNSM 2012 conference (Las Vegas). He is on the editorial board of the Elsevier Computer Networks journal. He is currently the scientific referee for international affairs at Inria Sophia Antipolis, and member of the Conseil d'Orientation Scientifique et Technologique (COST) at Inria within the working group of international affairs (COST-GTRI).

Vincent Roca is strongly involved at IETF and served as co-chair of the MSEC (Multicast Security) working group in 2010-2011. He is also member of the SecDir group (security directory) of the IETF. He was also member of the program committees of CFIP'09, SPACOMM'09, SPACOMM'10, the Cyber and Physical Security and Privacy symposium at IEEE SmartGridComm'11, CFIP'11, SPACOMM'11, SPACOMM'12.

Arnaud Legout was PC co-chair of the ICCCN 2009 conference track on P2P networking. He was also reviewer of journals (IEEE/ACM Transactions on Networking, IEEE/ACM Transactions on Computers, IEEE Network, Computer Communications, ACM SIGCOMM CCR), and conferences (IEEE Infocom, ACM Sigmetrics). He also served as an expert to the European Commission to evaluate EC funded projects.

Mohamed Ali Kaafar In 2012, he has been the program committee chair of ACM SIGMETRICS PADE workshop, and served in the program committees of the following international conferences: Internet Science 2013, Internet, ACM Sigcomm HotPlanet 2013, Interdisciplinarity & Innovation (In3 2013), Eurosys MPM 2013, IWAP2PT-2013, Colloque Jacques Cartier : Security, Inforensics and Cyber Criminality 2013, Eurosys MPM 2012, Sigmetrics PADE 2012, GridCom-2012, ICCSEA 2012, International Workshop on Trust and Privacy in Cyberspace (CyberTrust'12), IWTMP2PS 2012. He is also member of the Editorial Board of the International Journal of peer-to-peer networks (IJP2P) and IEEE Transactions on Parallel and Distributed Systems TPDS and reviewer in SIGCOMM CCR, Computer Communications, IEEE letters of communications, Computer Networks. He was a panelist in IEEE CCW 2012 and an invited speaker in University of Concordia, UNSW and Polytechnic University of New York seminars.

Daniel Le Le Métayer served in the program committees of CPDP 2012, APF12, RISE12, FLACOS 2012 and APVP 2012. He organized a panel on privacy for location based services at CPDP 2012 and gave invited talks at the university of Chalmers, at the BDA Summer School, at IRILL (Paris), at CRIDS (Namur), at the ANR Privacy by Design Conference and at the conference organized by CNIL on “Privacy and Data Protection 2020”.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Undergraduate course at IUT-2’ (UPMF University), on network Communications, by Vincent Roca (24h).

Undergraduate course on Networking, by Walid Dabbous (36h), Ecole Polytechnique, Palaiseau, France.

Undergraduate course on Networks and Telecommunications, by Mohamed Ali Kaafar (40h), Ensimag Engineering school, France.

Undergraduate course at Polytech’ Grenoble, on Wireless Communications, by Vincent Roca (12h).

Undergraduate course at IUT, Nice-Sophia Antipolis University, Local Aarea Networks by Chadi Barakat (28h), France.

Undergraduate course at IUP GMI Avignon on Peer-to-peer networks, by Arnaud Legout (38h), France.

Master Crypto and Security: course on Wireless Security by Claude Castelluccia (20h), Ensimag/University of Grenoble, France.

Master MOSIG: course on Wireless Security by Claude Castelluccia (15h), Ensimag/INPG, France.

Master FST : course on P2P networks: performance and security challenges by Mohamed Ali Kaafar (21h), Tunisia.

Master Phelma: course on Computer Networks by Mohamed Ali Kaafar (12h), INPG , France.

Master Ubinet: course on Evolving Internet - architectural challenges by Walid Dabbous and Chadi Barakat 42 hours, University of Nice-Sophia Antipolis, France.

Master CAR: course on Internet monitoring by Chadi Barakat, 3h, Telecom Paris Tech, France.

Master TSM: course on Voice over IP by Chadi Barakat, (7h),University of Nice-Sophia Antipolis, France.

Master Ubinet: course on Peer-to-peer networks, by Arnaud Legout (21), University of Nice-Sophia Antipolis.

Master SAFE: organization of a Teaching Unit on legal issues of security and privacy (30h) Daniel Le Le Métayer, University of Grenoble, France.

9.2.2. Supervision

PhD : Eduardo Mazza defended his PhD titled “A formal framework for specifying and analyzing liabilities using log as digital evidence” on June 30th, at Grenoble University. His thesis was co-supervised by Daniel Le Le Métayer.

PhD : Amir Krifa defended his PhD titled “Towards better content dissemination applications for Disruption Tolerant Networks” on April 23rd 2012. His thesis was supervised by Chadi Barakat.

PhD: Shafqat Ur-Rehman defended his PhD titled “Benchmarking in Wireless Networks” on January 30th, 2012. His thesis was co-supervised by Thierry Turletti and Walid Dabbous.

PhD: Sana Ben Hamida defended her PhD on “Embedded System Security” on February 27th 2012. Her thesis was supervised by Claude Castelluccia.

PhD in progress : Lukasz Olejnik works on “Internet Tracking and Profiling” since 2011. His thesis is supervised by Claude Castelluccia.

PhD in progress : Min-Dung Tran works on “Privacy-Preserving Ad systems” since 2011. His thesis is co-supervised by Claude Castelluccia and Mohamed Ali Kaafar.

PhD in progress : Abdelberri Chaabane works on “Online Privacy in heterogeneous networks” since September 2010. His thesis is supervised by Mohamed Ali Kaafar.

PhD in progress : Thibaud Antignac works on “A formal framework for privacy by design” since September 2011. His thesis is supervised by Daniel Le Le Métayer.

PhD in progress: Riccardo Ravaioli works on “Active and Passive Inference of Network Neutrality” since October 2012. His thesis is co-supervised by Chadi Barakat.

PhD in progress : Dong Wang works on “Modeling social media and its impact on new digital economy” since September 2011. His thesis is supervised by Mohamed Ali Kaafar.

PhD in progress: Xuan Nam Nguyen works on "Software Defined Networking in challenged environments", since October 2012. His thesis is co-supervised by Thierry Turletti and Walid Dabbous.

PhD in progress: Alina Quereilhac works on "Unified Evaluation environment of Networking Protocols for Simulators and Testbeds", since 2011. Her thesis is co-supervised by Walid Dabbous and Thierry Turletti.

PhD in progress: Ashwin Rao works on “Performance evaluation of communication networks”. His thesis is co-supervised by Arnaud Legout and Walid Dabbous.

PhD in progress: Ludovic Jacquin works on “High Bandwidth Secure Communications” since October 2009. His thesis is co-supervised by Vincent Roca and Jean-Louis Roch.

PhD in progress: Ferdaouss Mattoussi works on “Self-configuration and optimization of FEC over wireless protocol layers” since February 2010. Her work is co-supervised by Vincent Roca and Bessem Sayadi.

PhD in progress: Maksym Gabielkov works on “Propagation of data in social networks” since 2012. His work is supervised by Arnaud Legout.

PhD in progress: Wunan Gong works on “Security in content centric networks” since 2012. His work is supervised by Arnaud Legout.

PhD stopped: Anshuman Kalla stopped his PhD “Efficient transmission mechanisms for Information Centric Network Architectures” in June 2012 for personal reasons. His thesis was co-supervised by Thierry Turletti and Walid Dabbous.

ROMA Team

7. Dissemination

7.1. Scientific Animation

Anne Benoit is an associate editor of the *Journal of Parallel and Distributed Computing (JPDC)*. She was program vice co-chair of IEEE Cluster 2012; program vice-chair of IEEE AINA 2012; member of the organizing committee of SIAM PP 2012, and organizer of a mini-symposium in SIAM PP12. She is workshops co-chair of ICPP 2013. She is or was a member of the program committees of the following conferences and workshops: CCGrid 2012, HPDC 2012, IPDPS 2012, IPCE 2013, CCGrid 2013, IPDPS 2013, CLOSER 2013, HCW 2013, IGCC 2013.

Jean-Yves L'Excellent was a member of the program committees of Vecpar'12, Renpar'13.

Loris Marchal was a member of the program committees of IPDPS'2012, ICPP 2012 and IPDPS'2013.

Yves Robert is an associate editor of *IJHPCA*, *IJGUC* and *JOCS*. He is Program Chair of ICPP 2013 (Int. Conference on Parallel Processing) and of HiPC 2013 (Int. Conference on High Performance Computing). He was Program vice-chair of HiPC 2012. He is a Steering committee member of IPDPS and HCW. He is or was a member of the program committees of the following conferences and workshops: EduPar 2012, FTXS 2012, ISC 2012, ISCIS 2012, EduPar 2013, FTXS 2013, ICCS 2013, IGCC 2013, ISC 2013 and SC 2013.

Bora Uçar was a member of the program committee for six conferences/workshops in 2012 (HiPC12, IEEE Cluster 12, EuroPart 2012, PCO'12, PMAA2012, TCPP PhD Forum). He was an organizer of a mini-symposium in SIAM PP12. He is in the program committee of IPDPS 2013.

Frédéric Vivien is an associate editor of *Parallel Computing*. Frédéric Vivien is program vice-chair, for the algorithms track, of IPDPS 2013. He is or was a member of the program committee of the following conferences and workshops: EuroPDP 2013, RenPar 2013, ROADEF 2013, SC 13, CCGrid 2012, Cluster 2012, ROADEF 2012, AHPAA 2012.

7.2. Teaching - Supervision - Juries

7.2.1. Teaching

Loris Marchal, Ordonnancement, 36h, M2, École normale supérieure de Lyon, France.

Bora Uçar has given a mini course in Parallel Computing Group at the University of Murcia, 28 and 29 November 2011.

Frédéric Vivien, Algorithmique et Programmation Parallèles, 36 h, M1, École normale supérieure de Lyon, France.

Frédéric Vivien, Ordonnancement, 3 h, M2, École normale supérieure de Lyon, France.

7.2.2. Supervision

PhD: Paul Renaud-Goud, Energy-aware scheduling: complexity and algorithms, École Normale Supérieure de Lyon, July 5, 2012, Anne Benoit and Yves Robert.

PhD in progress: Guillaume Aupy, Multi-criteria scheduling on volatile platforms, September 1, 2011, Anne Benoit and Yves Robert.

PhD in progress: Dounia Zaidouni, Performance and execution models for exascale applications in failure-prone environments, October 1, 2011, Frédéric Vivien and Yves Robert.

PhD in progress: Mohamed Sid-Lakhdar, Exploitation of multicore architectures in the resolution of sparse linear systems by multifrontal methods, October 1, 2011, Jean-Yves L'Excellent et Frédéric Vivien.

PhD in progress: Julien Herrmann, Numerical algorithms for large-scale platforms, September 1, 2012, Loris Marchal and Yves Robert.

SARDES Project-Team

8. Dissemination

8.1. Scientific Animation

- S. Bouchenak : Co-General Chair of the CFSE/Renpar/SympA conferences in 2013.
- F. Boyer : Member of the Programme Committee of ICAS 2012.
- N. De Palma : Chair of the GCM (Green and Cloud Management) 2012 workshop.
- Vivien Quema : Organizer of the Winter School on Hot Topics in Distributed Systems (each year since 2008).
- E. Rutten : Member of the Programme Committee of APRES (Adaptive and Reconfigurable Embedded Systems workshop) 2012. Member of the IFAC Technical Committee 1.3 on Discrete Event and Hybrid Systems.
- J.B. Stefani : Chairman of IFIP WG6.1 on Architectures and Protocols for Distributed Systems. Chairman of the Steering Committee of the FMOODS/FORTE conference series. Member of the Programme Committee of ACM SAC 2012. Member of the editorial board of the journal Annals of Telecommunications. Member of the Technology Council of the company STMicroelectronics.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

- V. Quéma is a full-time professor at Grenoble INP.
- Noël de Palma is a full-time professor at Grenoble University.
- Olivier Gruber is a full-time professor at Grenoble University.
- Olivier Gruber is the head of the Parallel, Distributed, and Embedded Systems track in the international Master of Science in Informatics at Grenoble (MOSIG).
- Renaud Lachaize is a full-time assistant-professor at Grenoble University.
- Sara Bouchenak is a full-time assistant-professor at Grenoble University.
- Fabienne Boyer is a full-time assistant-professor at Grenoble University.
- Fabienne Boyer is the head of the M2PGI (Master Professionnel Génie Informatique) Alternance at Grenoble.

SOCRATE Team (section vide)

URBANET Team

9. Dissemination

9.1. Scientific Animation

- Marco Fiore organized and co-chaired the First Workshop on Urban Networking (UrbaNe'12), held jointly with the international conference ACM CoNEXT 2012.
- Marco Fiore was co-chair of the "Wireless Networks, Access Control and Resource Management" track at the international conference IEEE VTC'13 Spring.
- Marco Fiore was the keynote speaker at the IEEE WoWMoM VTP workshop in June 2012.
- Marco Fiore is/was TPC member for a number of international conferences, including IEEE SECON 2013, IEEE/IFIP WONS 2012/2013, IEEE WoWMoM 2012/2013, IEEE ICCCN 2012.
- Hervé Rivano is a member of the Section 07 of the CoNRS (scientific committee of CNRS, section ICT).
- Hervé Rivano is a member of the scientific committee of the Rescom pole.
- Hervé Rivano is a member of the CITI laboratory council.
- Razvan Stanica was session chair for the "Energy in Ad Hoc and Sensor Networks" session at the international conference IFIP Wireless Days 2012.
- Fabrice Valois is elected in the CITI laboratory council.
- Fabrice Valois was TPC member for a number of international conferences, including IEEE ICC, IEEE GlobeCom, IEEE WiMob, IEEE PIMRC, IEEE AINA, IEEE WPMC, SensorCom, iCost, IWCMC, GIIS.
- Fabrice Valois is in charge of the foreign affairs of the CITI laboratory.
- Fabrice Valois is correspondent member for the Labex IMU.
- Marco Fiore and Hervé Rivano are members of the Labex IMU.
- Khaled Boussetta was co-chair of the Technology track at the international conference GIIS 2012.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence :

- Marco Fiore, Introduction to Computer Networking, 30h, L3, INSA Lyon, France
- Razvan Stanica, TC Informatics Passport, 30h, L3, INSA Lyon, France
- Fabrice Valois, IP Networks, 50h, L3, INSA Lyon, France

Master :

- Marco Fiore, Performance evaluation of telecom networks, 80h, M1, INSA Lyon, France
- Marco Fiore, Advanced wireless networking, 20h, M1, INSA Lyon, France
- Marco Fiore, Services and protocols for wide-area networks, 90h, M1, INSA Lyon, France
- Marco Fiore, Future networking, 8h, M2, University of Lyon, France
- Fabrice Valois, Cellular networks, 50h, M1, INSA Lyon, France
- Fabrice Valois, Wireless sensor networks, 10h, M2, University of Lyon, France

Fabrice Valois is responsible of the networking teaching team in the Telecommunications department at INSA Lyon, coordinating all the courses linked to networking issues.

Since 2006, Fabrice Valois is the head of an international teaching program focused on Internet of Things, established between INSA Lyon and Shanghai Jiao Tong University.

Fabrice Valois and Marco Fiore are elected members of the Telecommunications Department Council at INSA Lyon.

Marco Fiore is the responsible for all Master theses defended in the Telecommunications Department at INSA Lyon, coordinating the related administrative activities.

9.2.2. Supervision

PhD :

- Ibrahim Amadou *Protocoles de routage sans connaissance de voisinage pour réseaux radio multi-saut*, INSA Lyon, 09/2012, Advisor: Fabrice Valois
- Bilel Romdhani *Exploitation de l'hétérogénéité des réseaux de capteurs et d'actionneurs dans la conception des protocoles d'auto-organisation et de routage*, INSA Lyon, 07/2012, Advisor: Fabrice Valois

PhD in progress :

- Jin Cui *Aggregation: From data dynamics to network dynamics*, since 11/2012. Advisor: Fabrice Valois.
- Ochirkhand Erdene-Ochir *Resilient networking security for WSN*, since 10/2009. Advisors: Marine Minier and Fabrice Valois
- Guillaume Gaillard *Multi-topology routing in IP-based wireless sensor networks with SLA support*, since 12/2012. Advisor: Fabrice Valois.
- Rodrigue D. Komguem *Autonomous WSN architectures for road traffic applications*, since 11/2012. Advisors: Fabrice Valois and Maurice Tchente (Univ. Yaoundé, Cameroun)
- Quentin Lampin *QoS constraints and time constraints in WSN*, since 10/2009. Advisors: Isabelle Augé-Blum and Fabrice Valois.
- Trista Lin *Urban mobility measurement and citizen-oriented services cartography*, since 10/2012. Advisors: Frédéric Le Mouel, Hervé Rivano and Fabrice Valois.
- Alexandre Mouradian *Real-time communication protocols for WSNs*, since 10/2010. Advisors: Isabelle Augé-Blum and Fabrice Valois.
- Diala Naboulsi *Human mobility - an urban networking perspective*, since 10/2012, Advisors: Marco Fiore, Hervé Rivano and Fabrice Valois.
- Anis Ouni *Study and optimization of capacity and energy consumption trade-off in wireless mesh networks*, since 10/2009. Advisors: Hervé Rivano and Fabrice Valois.
- Sandesh Uppoor *Understanding and exploiting mobility in wireless networks*, since 10/2010, Advisors: Marco Fiore and Fabrice Valois.

9.2.3. Juries

- Fabrice Valois was external reviewer of the following HDR defense:
 - N. Malouch, *Studying and Improving Various Control Mechanisms in Today's and Future Networks*, LIP6, Université de Paris VI, 2012
- Fabrice Valois was external reviewer of the following Ph.D. defenses:
 - B. Pavkovic, *Going towards the future Internet of Things through a cross-layer optimization of the standard protocol suite*, LIG, Université de Grenoble, 2012
 - S. Bellahsene, *Prédiction de la mobilité pour la gestion des handovers dans les réseaux IP : modèles et algorithmes*, PRISM, Université de Versailles, 2012
 - G. Corbellini, *Adaptive Medium Access Control for Heterogeneous Wireless Sensor Networks*, LIG, Université Joseph Fourier, 2012

- I. Salhi, *Un codage réseau contraint pour les réseaux de capteurs sans fil*, Institut Gaspard Monge, Université de Paris-Est, 2012
- Y. Mezali, *Algorithme de géolocalisation intérieure par différentiation de signaux WIFI*, Hipercom, Université Paris VI, 2012
- Fabrice Valois was external examiner of the following Ph.D. defense:
 - M. Iturralde, *Performance des réseaux LTE*, IRIT, Université de Toulouse, 2012
- Fabrice Valois was member of a CoS 27MCF for a position of MCF at University of Avignon.
- Fabrice Valois was president of a CoS 27MCF for a position of MCF at INSA Lyon.
- Marco Fiore was member of a CoS 27MCF for a position of MCF at INSA Lyon.

9.2.4. Internships

Florin Avram (L3)

Subject: Networking analysis of metropolitan-scale vehicular mobility

Institution: University of Oradea (Romania)

Advisor: Marco Fiore

Duration: 4 months

Calin Rares Lucaciu (L3)

Subject: Networking analysis of metropolitan-scale vehicular mobility

Institution: University of Oradea (Romania)

Advisor: Marco Fiore

Duration: 4 months

Piotr Mach (L3)

Subject: Vehicular Connectivity Graphs in Urban Environments

Institution: Warsaw University of Technology (Poland)

Advisor: Marco Fiore

Duration: 4 months

Carl Nolan (L3)

Subject: Vehicular Connectivity Graphs in Urban Environments

Institution: Dublin City University (Ireland)

Advisor: Marco Fiore

Duration: 4 months

Egert-Priit Arus (L3)

Subject: Integrating Electric Vehicles with Smart Grids

Institution: Tallin University of Technology (Estonia)

Advisor: Razvan Stanica

Duration: 4 months

Keijiro Nakagawa (L3)

Subject: Multi-commodity flow in delay tolerant networks

Institution: Tokyo University (Japan)

Advisor: Hervé Rivano

Duration: 4 months

Yesser Bouguerra (M2)

Subject: Data aggregation in multi-hop wireless networks

Institution: INSA Lyon (France)

Advisor: Fabrice Valois

Duration: 6 months

Nicolas Gaspard (M2)

Subject: Multi-service routing in urban wireless sensor networks

Institution: INSA Lyon (France)

Advisor: Fabrice Valois

Duration: 6 months

Mickael Lam (L3)

Subject: Large scale vehicular networks

Institution: INSA Lyon (France)

Advisor: Marco Fiore

Duration: 4 months

Trista Lin (M2)

Subject: Optimization of MAC layer protocols for urban wireless sensor networks

Institution: INSA Lyon (France)

Advisor: Fabrice Valois and Hervé Rivano

Duration: 6 months

Iulia Tunaru (M2)

Subject: Applying sensor networks energy efficiency solutions to mesh networks

Institution: INSA Lyon (France)

Advisor: Fabrice Valois and Hervé Rivano

Duration: 6 months

Diala Naboulsi (M2)

Subject: Large scale vehicular networks

Institution: INSA Lyon (France)

Advisor: Marco Fiore

Duration: 6 months

9.3. Popularization

- Fabrice Valois gave a seminar on the Internet of Things entitled *Etat de l'art sur les réseaux de capteurs*, organized by the ASPROM Association in Paris in October 2012.

E-MOTION Project-Team

7. Dissemination

7.1. Animation of the scientific community

7.1.1. conferences and workshops

- C. Laugier organised a workshop on intelligent vehicles during IROS' 12.
- C. Laugier was program chair of IEEE/RSJ IROS 2012 conference in Vilamoura (Portugal, oct. 2012).
- C. Laugier co-organised workshop at the IEEE/RSJ IROS 2012 conference in Vilamoura (Portugal, oct. 2012).
- A. Spalanzani organised a workshop on Assistance and Service robotics in a human environment during IROS' 12.
- C. Laugier was member of the conference editorial Board and member of the Program Committee of the IEEE ICRA 2012 conference (Mineapolis, may 2012).
- A. Spalanzani was associate editor of the Ro-Man 2012 conference.
- A. Martinelli was Associate Editor at ICRA 2012.
- C. Laugier co-organized with Philippe Martinet a workshop on intelligent vehicles during IEEE/RSJ IROS' 12 in Algarve (Portugal).
- A. Spalanzani co-organized with D. Daney, JP Merlet and O. Simonin a workshop on Assistance and Service robotics in a human environment during IEEE/RSJ IROS' 12 in Algarve (Portugal).
- C. Laugier has been appointed as program co-chair at the IEEE/RSJ IROS 2012 conference (Algarve, Portugal).
- C. Laugier is co-chair of the IEEE RAS Technical Committee on "Autonomous Ground Vehicles and Intelligent Transportation Systems". He co-organized in this scope several scientific events in 2012 (workshops, special sessions of International conferences, a journal special issue in "Robotics and Automation Magazine" to be published in 2013). - C. laugier was Associate Editor for the part "Fully Autonomous Driving" of the Springer "Handbook on Intelligent Vehicles" published in March 2012.
- C. Laugier has been invited as an Associated Editor (with A. Zelinsky, A. Broggi and U. Ozgüner) for chapter "Intelligent Vehicles" of the 2nd edition of the Springer "Handbook of Robotics" to be published in 2013-14.
- A. Spalanzani co-organised a workshop at the IEEE/RSJ IROS 2012 conference in Vilamoura (Portugal, oct. 2012).
- C. Laugier was member of the conference editorial Board and member of the Program Committee of the IEEE ICRA 2012 conference (Mineapolis, may 2012)
- C. Laugier was program chair of IEEE/RSJ IROS 2012 conference in Vilamoura (Portugal, oct. 2012)
- C. Laugier co-organised workshop at the IEEE/RSJ IROS 2012 conference in Vilamoura (Portugal, oct. 2012).
- C. Laugier was a member of the program committee of the FSR 2012 conference (Japan, march 2012)

7.1.2. invited talks

- C. Laugier has given a seminar entitled "Autonomous Mobility in Human Environments" at the University of Tokyo on March 2012.
- C. Laugier has given an invited talk entitled "Situation Awareness and Collision Risk Assessment: Application to Autonomous Vehicles in Open Dynamic Environments" at the Workshop on Field and Service Robotics in Sendai on March 2012.
- C. Laugier and S. Lefevre have given an invited talk entitled "Embedded Perception and Situation Awareness for improving Driving Safety" at the 2nd Workshop Berkeley-Inria-Stanford in Paris on May 2012.
- C. Laugier has given an invited talk entitled "Human Centered Robotics and Mobility" at the NTU-IRiCE Workshop on Robotics and Automation in Taipei on May 2012.

7.1.3. others

- A. Spalanzani, M. Perrollaz, P Stein, A. Escobedo, J. Rios and C. Laugier have presented the robotic wheelchair at the innorobo 2012 fair, march 2012.
- C. laugier participated as panelist expert to the large public event "Talents de Rhône-Alpes: Homme/Robot qui aura la main?" in Lyon on December 18th 2012.
- F. Breton and C. laugier have published a vulgarization article entitled "Les robots apparaissent dans l'espace de vie des humains", October 2012.
- A. Martinelli was reviewer of the PhD thesis of Stephan Weiss at ETHZ in March 2012.
- A. Spalanzani and C. Laugier participated to the organization of the French-Mexican summer school on robotics and vision (SSIR'12) in Ensenada (Mexico).
- M. Perrollaz made a talk at the "Fête de la science", oct 2012.

7.2. Teaching

- Master MOSIG: "autonomous Robotics", C. Laugier (responsible), A. Martinelli, M. Perrollaz, A. Nègre, 24h, M2, MOSIG-INP, France.
- Master CNAM: "Basic technologies for autonomous Robotics", C. Laugier, CNAM, France.
- Doctorat (école d'été): "autonomous Robotics", C. Laugier, 6h, SSIR'12, Ensenada, June 2012, Mexico.
- Ecole d'Ingénieur : "Programmation structurée en C", M. Perrollaz, 36h, L3, Phelma, Grenoble-INP, France.

PhD & HdR :

- PhD in progress: Chiara Troiani, vision and inertial sensor fusion for 3D navigation, 2011, A. Martinelli.
- PhD in progress: Jorge Rios-Martinez, Comfortable navigation using social conventions, 2009, A. Spalanzani.
- PhD in progress: Arturo Escobedo, Shared Control navigation, 2011, A. Spalanzani.
- PhD in progress: Raphael Laurent, Bayesian modelling to implement and compare different theories of speech communication, 2011, P. Bessière.
- PhD in progress: Stéphanie Lefèvre, context-aware bayesian filtering for collision prediction at roads intersections, defended in 2012, C. Laugier
- PhD in progress: Gabriel Synnaeve, Bayesian programming applied to a multi-player video games, defended in 2012, P. Bessière.
- PhD in progress: Alessandro Renzaglia, 3D coverage by using stochastic approach, defended in 2012, A. Martinelli.

EXMO Project-Team

8. Dissemination

8.1. Scientific Animation

- Jérôme Euzenat is founding member of the "Semantic Web Science Association" (steering committee for the ISWC conference series).
- Editorial board of *Journal of Web Semantics*, *Journal on Data Semantics* and *Semantic web journal* (Jérôme Euzenat).
- Jérôme David has been tutorial chair (with Irwin King) of the 21st International World Wide Web Conference (WWW).
- Jérôme Euzenat has been co-chairman (with Manfred Hauswirth and Josie Xavier Perreira) of the "Experiment and evaluation" track of the 11th "International Semantic Web Conference" (ISWC, Boston, MA US), 2012
- Jérôme Euzenat has been programme committee member for the 2012 issues of the conferences International Semantic Web Conference (ISWC), Worldwide Web Conference (WWW), National Conference on Artificial Intelligence (AAAI) International conference on Knowledge Engineering and Knowledge Management (EKAW), Formal Ontologies for Information Systems (FOIS), International Conference on Conceptual Modelling (ER).
- Jérôme David has been programme committee member of the International Conference on Mobile Web Information Systems (MobiWIS) 2012.
- Jérôme David has been programme committee member for the 2012 issues of the Ontology matching workshop (OM), Artificial Intelligence meets the Web of Data workshop (AIMWD) and Downscaling the Semantic Web workshop (Downscale).
- Cassia Trojahn has been programme committee member for the 2nd International Workshop on Evaluation of Semantic Technologies (IWEST) and the 7th International Workshop on Ontology Matching (OM).
- Jérôme Euzenat has also been programme committee member for the ESWC international workshop on the "evaluation of semantic technologies (iWEST)", IJCAR workshop on "OWL reasoner evaluation", ECAI workshop on "Cooking with computers", ECAI workshop on "Artificial intelligence meets the web of data", ISWC workshop on "Knowledge evolution and ontology dynamics" (EvoDyn).
- Jérôme Euzenat has organised (with Pavel Shvaiko, Anastasios Kementsietsidis, Ming Mao, Natasha Noy and Heiner Stuckenschmidt) the 7th "Ontology matching" workshop of the 11th ISWC, Boston (MA US), 2012 [22].
- Jose Luis Aguirre, Jérôme Euzenat and Cássia Trojahn dos Santos have organised (with many other colleagues) the Ontology Alignment Evaluation Initiative 2012 at the "Ontology matching" workshop of the 11th ISWC, Berlin (MA US), 2012 [7].
- Cassia Trojahn dos Santos has organised the SEALS meeting welcoming 20 people for four days in Grenoble.
- Jérôme Euzenat has been consulted by the ISO OntoIOP working group (ISO/TC 37/SC 3 "Systems to manage terminology, knowledge and content") on alignment formats (2012).
- Invited conference on "The web of data as an AI playground", ECAI "AI and linked data" workshop, Montpellier (FR), 27/08/2012 (Jérôme Euzenat)
- Invited conference on "Distributed and dynamic knowledge for real", OntoBras conference, Recife (BR), 21/09/2012 (Jérôme Euzenat)

- Seminar on “Linked data from your pocket: The Android RDFContentProvider”, Prague University of Economics, Prague (CZ), 11/12/2012 (Jérôme David)
- Seminar on “Ontology alignment metadata”, Open ontology repository metadata workshop, Conference call, 24/04/2012 (Jérôme Euzenat)
- Seminar on “What you say is what I get; what you don’t say is what I don’t get”, Dagstuhl seminar on «Cognitive approaches to the semantic web», Wadern (DE), 30/05/2012 (Jérôme Euzenat)
- Seminar on “Quelques questions sur les réseaux d’ontologies”, Limos seminar, Clermont-Ferrand (FR), 14/06/2012 (Jérôme Euzenat)

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Licence: Jérôme David, Outils Informatique (c2i), 18, L1, UPMF, France

Licence: Jérôme David, Développement Mobile, 25, L3, UPMF, France

Licence: Jérôme David, Introduction à Java, 24, L3, UPMF, France

Licence: Jérôme David, Programmation Avancée, 20, L3, UPMF, France

Licence: Jérôme David, Introduction aux bases de données relationnelles, 8, L2, UPMF, France

Master: Jérôme David, Programmation Java 2, 30, M1-M2, UPMF, France

Master: Jérôme David, JavaEE, 30, niveau M2, UPMF, France

Master: Jérôme David, Développement Web Mobile, 30, M2, UPMF, France

Master: Jérôme David, Interface Homme Machine 2, 30, M2, UPMF, France

Master: Jérôme Euzenat, Semantic web: from XML to OWL, 27heqTD, M2R, Université Joseph Fourier & INPG, France

Post-graduate level: Jérôme Euzenat, Ontology matching, 4heqTD, European Summer School on Ontology Engineering and the Semantic Web, Spain

8.2.2. Supervision

PhD: Melisachew Wudage Chekol, Static analysis of semantic web queries [4], Université de Grenoble, 19/12/2012, supervisors: Jérôme Euzenat and Nabil Layaida

PhD in progress: Zhengjie Fan, Ontology-based data interlinking, 1/1/2011, supervisors: Jérôme Euzenat and François Scharffe

PhD in progress: Tatiana Lesnikova, Multilingual data interlinking, 1/10/2012, supervisors: Jérôme Euzenat and Jérôme David

PhD in progress: Armen Inants, Ontology alignment algebra, 1/12/2012, supervisor: Jérôme Euzenat

8.2.3. Juries

- PhD: David Rouquet, Multilinguisation d’ontologies dans le cadre de la recherche d’information translingue dans les collections d’images accompagnées de textes spontanés, Université de Grenoble, 6/4/2012, Valérie Bellynck and Christian Boitet
- PhD: Nathalie Abadie, Formalisation, acquisition et mise en œuvre de connaissances pour l’intégration virtuelle de bases de données géographiques: les spécifications au cœur du processus d’intégration, Université Paris-Est, 20/11/2012, Anne Ruas and Sébastien Mustière
- PhD: Anna Tordai, On combining alignment techniques, Vrije Universiteit Amsterdam, 2/12/2012, Guus Schreiber and Bob Wieliga
- PhD: Duy Hoa Ngo, Enhancing Ontology Matching Quality By Using Machine Learning, Graph Matching And Information Retrieval Techniques, Université de Montpellier 2, 14/12/2012, Zohra Bellahsène

8.3. Popularization

- Jérôme Euzenat gave a presentation on *Library resources and the web of data: the missing link* at the Millenium club (group of librarians) days, Montbonnot (FR), 28/03/2012.
- Jérôme Euzenat coordinated of the INTech technology watch seminar on *L'ouverture des données: technologies et usages (Open data: technology and use)*, 7 presentations, 12 demonstrations, 80 participants, Montbonnot, 5/6/2012.
- Jérôme Euzenat has been interviewed by Françoise Breton, “l'émergence d'un web des connaissances”, published on the Inria Grenoble Rhône-Alpes web site ¹, 25/09/2012.

¹<http://www.inria.fr/centre/grenoble/actualites/l-emergence-d-un-web-des-connaissances>

IMAGINE Team

9. Dissemination

9.1. Scientific Animation

9.1.1. Organization of conferences and editorial boards

- Marie-Paule Cani
 - General co-chair with Beryl Plimmer of the Expressive 2012 conference, co-sponsored by ACM SIGGRAPH and Eurographics, which grouped three international even in Annecy, in June 2012: Sketch-Based Interfaces and Modeling (SBIM), Non-protorealistic Animation & Rendering (NPAR) and Coputational Aesthetics (CAe).
 - Editorial boards of Computer Graphics Forum and of Graphical Models.
 - Steering committees of Shape Modelling International (SMI) and of SBIM.
- Stefanie Hahmann
 - SPM 2012 paper chair
 - Journal CAD Vol. 45 No.2 (Elsevier), Special Issue of SPM 2012, co-editor
 - Journal Graphical Models Vol. 74 No. 6 (Elsevier), Special Issue on Geometric Modling, co-editor
- Jean-Claude Léon
 - Local chair of EXPRESSIVE 2012 conference
- Rémi Ronfard
 - Member of the program committees for the international conferences on Computational Aesthetics (CAE), Interactive Digital Storytelling (ICIDS) and Motion in Games (MIG).
 - Organization of the 3rd international workshop on 3D Cinematography in Providence, USA, during the CVPR conference, with an audience of 100 participants. The 3D Cinematography series of workshops is devoted to all areas of computer vision contributing to the generation of 3D content from live action video, including structure from motion, binocular and trinocular stereo, multi-view stereo, geometric modeling, 3D signal processing, plenoptic modeling and light field cameras.

9.1.2. Management and administration of scientific organisations

- Marie-Paule Cani
 - Co-chair with Laurence Nigay of the axis "Authoring Augmented Reality" of the LaxeB Persyval.
 - Member of the executive board of the GDR Informatique Graphique (IG), a french virtual lab sponsored by CNRS.
 - Elected member of the executive committee of EG-France, the french chapter of eurographics.
 - Elected to the executive committee of Eurographics, where she will serve as second vice president from January 2013.
 - Member of the ACM Publication board (monthly audi-confs plus two in person meetings a year, to handle new publications, changes of editors in chiefs and the publication strategy of the ACM.
- François Faure

- Member of the Conseil du Laboratoire at LJK.
- Stefanie Hahmann
 - President of GTMG (Groupe de Travail en Modelisation Géométrique) part of GDR IM and GDR IG.
 - Member of the Conseil du Laboratoire at LJK.
 - Vice chair of SIAM activity group Geometric Design.
 - Responsible of Maths-Info Department of the Grenoble doctoral school MSTII.
- Olivier Palombi
 - Member of the scientific board of ECCAMI (Excellence center for computer assisted medical interventions).
- Rémi Ronfard
 - Responsible of the *Géométrie and Images* department at LJK.
 - Member of the Conseil du Laboratoire at LJK.
 - Coordinator of a *thematic action* of the national GDR ISIS, on face, gesture, action and behavior (Visage, geste, action et comportement), together with Catehrine Achard and Patrick Horain (Télécom Paris Tech).

9.1.3. Public dissemination

- Marie-Paule Cani gave two key-note talks in Febuary 2012, "Towards expressive modelling of animated virtual worlds", respectively within the key-note speech of the LIG laboratory (Laboratoire d'informatique de Grenoble) and in the Polaris colloquium "From real to virtual" sponsored by Inria Lille.
- In March 2012, Marie-Paule Cani gave the talk "Are women afraid of computer science" at the European Research Center of Xerox, at the occasion of the "woman day".
- In May, Marie-Paule Cani gave courses on modeling and animation of virtual worlds, respectively within the cursus for high-school professors in computer sciences set up by Inria, and within a symposium for "classes préparatoire" professors organized by Ensimag/Grenoble INP.
- In November 2012, Marie-Paule Cani gave a course on "high-level models for intuitive modelling and animation" to the french PhD students in Computer Graphics, within the doctoral school day in Calais co-organized by the GDR IG (Informatique Graphique) and by the french Computer Graphics association (AFIG).
- Olivier Palombi gave a talk in *journée des sciences de l'université de Gène* in Italia.
- The images of the flat torus rendered by Damien Rohmer (see chap. 6.2.2) have been published in several magazines: [NewScientist](#), [Magazine Science](#), [Universcience](#), [Wired](#), [IO9](#), [The Aperiodical](#), [Images des mathématiques](#).

9.2. Teaching - Supervision

9.2.1. Responsibilities of academic programs

- Responsible of the French [Campus numérique](#) of anatomy, Olivier Palombi.
- Responsible and national leader of the project SIDES (<http://side-sante.org/>). All the French medical schools (43) have planed to use the same e-learning framework (SIDES) to manage evaluations (examen) and to create a large shared database of questions. Olivier Palombi
- Marie-Paule Cani and then François Faure were responsible of the GVR-(Graphics, Vision and Robotic) programm in the MOSIG Master.

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

9.2.2. Educational activities

- Marie-Paule Cani, 200 hours a year, Professor ENSIMAG/Grenoble INP.
- Stefanie Hahmann, 200 hours a year, Professor ENSIMAG/Grenoble INP, M2R MIA.
- Jean Claude Léon, 96 hours a year, Professor ENSE3/Grenoble INP.
- Olivier Palombi, 200 hours a year, Professor UJF, medicine.
- Damien Rohmer, 200 hours a year, Assistant Professor CPE Lyon.
- Rémi Ronfard, 18 hours, M2 Pro, UJF.

LEAR Project-Team

9. Dissemination

9.1. Scientific Animation

- Conference, workshop, and summer school organization:
 - Z. Harchaoui: Co-organizer of the ICML 2012 Workshop on New Trends in RKHS and kernel-based methods, July 2012.
 - Z. Harchaoui: Co-organizer of the Optimization and Statistical Learning workshop, Les Houches, January 2013.
 - C. Schmid: Co-organizer of the Inria Visual Recognition and Machine Learning Summer School, Grenoble, July 2012. Attracted a total of 182 participants (48 from France, 94 from Europe and 40 from America and Asia).
 - C. Schmid: Co-organizer IPAM workshop Large Scale Multimedia Search, January 9–13, 2012.
- Editorial boards:
 - C. Schmid: International Journal of Computer Vision, since 2004.
 - C. Schmid: Foundations and Trends in Computer Graphics and Vision, since 2005.
 - J. Verbeek: Image and Vision Computing Journal, since 2011.
- General chair:
 - C. Schmid: CVPR '15.
- Program chair:
 - C. Schmid: ECCV '12.
- Area chair:
 - J. Verbeek: BMVC '12, ECCV '12
 - C. Schmid: NIPS '12, CVPR '13, ICCV '13
- Program committees:
 - AISTATS 2012: Z. Harchaoui.
 - BMVC 2012: T. Mensink.
 - CVPR 2012: Z. Harchaoui, T. Mensink, C. Schmid, J. Verbeek.
 - ECCV 2012: M. Douze, T. Mensink, J. Verbeek.
 - ICML 2013: Z. Harchaoui, J. Mairal.
 - NIPS 2012: Z. Harchaoui, J. Verbeek.
 - WACV 2013: R. Cinbis.
 - NIPS computational biology workshop 2012: J. Mairal.
- Prizes:
 - C. Schmid was nominated IEEE Fellow, 2012.
 - Best paper award of Pattern Recognition journal in 2009 for the paper *Description of interest regions with local binary patterns*. M. Heikkila, M. Pietikainen, C. Schmid. Pattern Recognition Volume 42, Issue 3, March 2009, Pages 425-436, <http://hal.inria.fr/inria-00548650/en>.

- We participated in the Multimedia Event Detection track of TrecVid 2012, one of the major benchmarks in automatic video analysis. We ranked 2-nd out of 17 participants for the pre-specified event category task, and first out of 13 participants on the ad-hoc event category task.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Courses taught by team members in 2012:

- Z. Harchaoui, Kernel-based methods for statistical machine learning, 18h, M2, Grenoble University, France.
- Z. Harchaoui, Tutorial on large-scale learning, 1h, ENS-Inria Visual Recognition and Machine Learning Summer School 2012, Grenoble, France.
- J. Revaud and M. Douze, Multimedia Databases, 18h, M2, ENSIMAG, France.
- C. Schmid, Object recognition and computer vision, 10h, M2, ENS ULM, France.
- C. Schmid and J. Verbeek, Machine Learning & Category Representation, 18h, M2, ENSIMAG, France.
- C. Schmid, Tutorial on image search and classification, 3h, Inria Visual Recognition and Machine Learning Summer School 2012, Grenoble, France.

9.2.2. Supervision

PhD theses defended in 2012:

- A. Gaidon, *Structured Models for Action Recognition in Real-world Videos - Modèles Structurés pour la Reconnaissance d'Actions dans des Vidéos Réalistes* [1], Université de Grenoble, 25/10/2012, advisers: Z. Harchaoui and C. Schmid.
- T. Mensink, *Apprentissage de Modèles pour la Classification et la Recherche d'Images* [2], Université de Grenoble, 26/10/2012, advisers: J. Verbeek, G. Csurka, and C. Schmid.
- A. Prest, *Weakly supervised methods for learning actions and objects* [3], ETHZ, 4/9/2012, advisers: V. Ferrari, and C. Schmid.
- G. Sharma, *Semantic description of humans in images*, Université de Caen, 17/12/2012, advisers C. Schmid and F. Jurie.

9.2.3. Juries

Participation in PhD defense juries:

- J. Verbeek, jury member of PhD committee for N. Elfiky, Computer Vision Centre, Barcelona, Spain, June 2012.
- C. Schmid, jury member of PhD committee for S. Bak, Université of Sophia-Antipolis, July 2012.
- C. Schmid, jury member of PhD committee for O. Duchenne, ENS Cachan, November 2012.
- C. Schmid, jury member of PhD committee for A. Joulin, ENS Cachan, December 2012.

9.3. Invited presentations

- Z. Akata: Seminar at Computer Vision and Machine Learning group, Institute of Science and Technology, Vienna, Austria, December 2012.
- A. Gaidon: Presentation at MSR-Inria CVML workshop, Microsoft Research, Cambridge, UK, April, 2012.
- A. Gaidon: Seminar at ETH Zürich, Switzerland, April, 2012.
- A. Gaidon: Seminar at Xerox Research Center Europe (XRCE), Meylan, France, May, 2012.
- Z. Harchaoui: Seminar at Gatsby Neuroscience Unit, UCL, London, March 2012.
- Z. Harchaoui: Presentation at International Symposium in Mathematical Programming, Berlin, August 2012.
- Z. Harchaoui: Seminar at UC Berkeley, September 2012.
- Z. Harchaoui: Presentation at ECML/PKDD Discovery Challenge, Bristol, September 2012.
- Z. Harchaoui: Seminar at Visual Geometry group, Oxford University, October 2012.
- J. Mairal: Seminar at Parietal team, Neurospin, CEA - Inria, Saclay, France, November 2012.
- J. Mairal: Seminar at Institut Curie, Paris, France, November 2012.
- J. Mairal: Seminar at Willow and Sierra teams, Inria, Paris, France, November 2012.
- J. Mairal: Seminar at EPFL, Lausanne, Switzerland, November 2012.
- T. Mensink: Seminar at Computer Vision and Machine Learning group, Institute of Science and Technology, Vienna, Austria, March 2012.
- C. Schmid: Workshop on Large Scale Multimedia Search, Los Angeles, January 2012.
- C. Schmid: Seminar at New York University, May 2012.
- C. Schmid: Seminar at Google, Zürich, May 2012.
- C. Schmid: Seminar at ETHZ, Zürich, May 2012.
- C. Schmid: Keynote speaker at ACM International Conference on Multimedia Retrieval (ICMR), Hong Kong, June 2012.
- C. Schmid: Keynote speaker at the International Symposium on Visual Computing, Crete, July 2012.
- C. Schmid: Tutorial on modern features at ECCV 2012, Florence, October 2012.
- C. Schmid: First international workshop on visual analysis and geo-localization of large-scale imagery in conjunction with ECCV'12, Florence, October 2012.
- C. Schmid: Keynote speaker at GdR ISIS, Le Touquet, November 2012.
- C. Schmid: Seminar at UC Berkeley, December 2012.
- J. Verbeek: Seminar at TEXMEX group, Inria, Rennes, France, April 2012.
- J. Verbeek: Seminar at Computer Vision and Machine Learning group, Institute of Science and Technology, Vienna, Austria, June 2012.
- J. Verbeek: Seminar at Computer Vision Centre, Barcelona, Spain, June 2012.

9.4. Popularization

- C. Schmid will present in 2013 the research area of visual recognition to a group of school teachers as well as to a class of high school students.

MAVERICK Team

8. Dissemination

8.1. Scientific Animation

- Georges-Pierre Bonneau is member of the recruitment committee of associate professors at UJF.
- Georges-Pierre Bonneau is member of the IPCs of EUROVIS 2012.
- Joëlle Thollot is member of the IPCs of NPAR 2012.
- Joëlle Thollot is member of the IPCs of Computational Aesthetics 2012.
- Nicolas Holzschuch is program chair of the Eurographics Symposium on Rendering 2012,
- Nicolas Holzschuch is member of the "Commission d'évaluation" of Inria,
- Romain Vergne is member of the jury for the best paper at AFIG 2012.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Joëlle Thollot and Georges-Pierre Bonneau are both full Professor of Computer Science. Romain Vergne is an associate professor in Computer Science. They teach general computer science topics at basic and intermediate levels, and advanced courses in computer graphics and visualization at the master levels. Nicolas Holzschuch teaches computer graphics at intermediate and advanced levels. Fabrice Neyret taught a course called "Science and Society" to master and doctorate students at the university of Rennes.

Joëlle Thollot, 200 hours a year, professor, ENSIMAG/Grenoble INP.

Georges-Pierre Bonneau, 200 hours a year, professor, Polytech/Grenoble UJF.

Romain Vergne, 200 hours a year, associate professor, IM2AG/Grenoble UJF.

Nicolas Holzschuch, 53 hours a year, DR2 Inria.

Fabrice Neyret, 3 hours a year, DR2 CNRS.

8.2.2. Supervision

PhD : Nassim Jibai, Multi-scale Feature-Preserving Smoothing of Images and Volumes on GPU, Université de Grenoble, May 2012, Nicolas Holzschuch, Jean-Philippe Farrugia.

PhD : Laurent Belcour, A Frequency Analysis of Light Transport: from Theory to Implementation, Université de Grenoble, November 2012, Nicolas Holzschuch, Cyril Soler.

PhD : Mahdi Bagher, Material appearance: photorealistic representation and rendering, Université de Grenoble, November 2012, Cyril Soler, Nicolas Holzschuch.

PhD : Alexandre Coninx, Visualisation interactive de grands volumes de données incertaines : pour une approche perceptive, Université de Grenoble, May 2012, Georges-Pierre Bonneau, Jacques Droulez.

PhD in progress : Eric Heitz, Représentations alternatives pour le traitement haute qualité efficace des scènes complexes, October 2010, Fabrice Neyret.

PhD in progress : Manuel Vennier, Modèles pour l'animation et le rendu temps réel d'océans à des échelles multiples, December 2010, Fabrice Neyret, Joëlle Thollot.

PhD in progress : Léo Allemand-Giorgis, Visualisation de champs scalaires guidée par la topologie, October 2012, Georges-Pierre Bonneau, Stefanie Hahmann.

PhD in progress : Benoît Zupancic, acquisition of reflectance properties using compressive sensing, October 2012, Nicolas Holzschuch, Cyril Soler.

PhD in progress : Hugo Loi, Automatisation de la génération de textures vectorielles et application à la cartographie, October 2012, Joëlle Thollot, Thomas Hurtut.

PhD in progress : Alexandre Derouet-Jourdan, Courbes dynamiques : de la capture de formes géométriques à l'animation, September 2012, Florence Bertails-Descoubes, Joëlle Thollot.

8.2.3. *Juries*

- Georges-Pierre Bonneau was rapporteur at the PhD defense of Minh-Duc Huynh on July 2012, at the university of Pau.
- Joëlle Thollot was rapporteur at the PhD defense of Bert Buchholz on December 2012, at Paritech (Paris).
- Joëlle Thollot was rapporteur at the PhD defense of Jiazhou Chen on July 2012, at the university of Bordeaux 1.

8.3. Popularization

Fabrice Neyret made the following diffusions:

Articles about diffusion of critical thinking and scientific method (Observatoire Zététique, newsletter + website):

- "Analysis of a dr Labré's conference about 'alternative medicine': wrong obviousness and hidden contradictions."
- "Voices in my home ! Spirits or pareidolia ?"
- "Astrology lived from inside."

Actions for high-school students:

- MobiNet, free graphical programmable simulation software (<http://mobinet.imag.fr>)
- MobiNet class sessions: "maths & phys with meaning / how videogames and simulations are made ?". 8 high-school classes per year through INPG "engineering weeks" with regional funding.
- MobiNet class sessions: through MathC2+regional operation for high schools hosted by Inria.

Public debates and conferences:

- Jury + debate at Science-Po Grenoble about "virtuality and democracy"
- 3h in the Master transversal module about researcher responsibility (140 master & PhD students from all domains of Biology-Agronomy-Health at Rennes University)

Large public press and books:

- participation to the paper "History of Computer Graphics" in La Recherche
- "Sciences of 3D", book in preparation at Belin-PLS ed.

MORPHEO Team

9. Dissemination

9.1. Scientific Animation

- Edmond Boyer was area chair of BMVC 2012.
- Edmond Boyer was a member of the program committees of: CVPR 2012, ECCV 2012, 3DIMPVT 2012, ACCV 2012, CVMP 2012 and the CDC4CV ECCV 2012 workshop.
- Edmond Boyer has been reviewing for the journals: IEEE PAMI, springer IJCV and elsevier CVIU.
- Edmond Boyer was president of two PhD committees, reviewer of one PhD thesis and he was examiner of three PhD thesis.
- Edmond Boyer gave invited talks at Kyoto university, MPI Sarrebrucken, Hong Kong university and Marseille Luminy.
- Franck Hétroy has been reviewing for the journals: IEEE TVCG, Computer and Graphics, Computer-Aided Design, ReFIG, and for the conferences: Eurographics 2012.
- Jean-Sébastien Franco has reviewed for the following conferences: CVPR 2012, ECCV 2012, VR 2012, 3DIMPVT 2012, BMVC 2012.
- Jean-Sébastien Franco has reviewed for the following journals: CVIU
- Lionel Reveret was a committee member of EUROGRAPHICS 2012.
- Lionel Reveret has reviewed for the conferences: EUROGRAPHICS 2013, SIGGRAPH Asia 2012, Pacific Graphics'12, BMVC'12.
- Lionel Reveret has been reviewing for the journals: IEEE TVCG, Computer Graphics Forum.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

- E. Boyer, Master: synthese d'images, 15h, M1 informatique, Université Joseph Fourier Grenoble.
- E. Boyer, Master: projet de programmation, 15h, M1 informatique - M1 MoSig, Université Joseph Fourier Grenoble.
- E. Boyer, Master: Introduction to Image Analysis, 15h, M1 MoSig, Université Joseph Fourier Grenoble.
- E. Boyer, Master: Computer Vision, 12h, M2R MoSig, Université Joseph Fourier Grenoble.
- F. Hétroy, Master: algorithmique et programmation orientee objets, 36h, Ensimag 2nd year, Grenoble INP.
- F. Hétroy, Master: modelisation et programmation C++, 27h, Ensimag 2nd year, Grenoble INP.
- F. Hétroy, Master: projets de specialite image, 28h, Ensimag 2nd year, Grenoble INP.
- F. Hétroy, Master: introduction a la recherche en laboratoire, 3h, Ensimag 2nd year, Grenoble INP.
- F. Hétroy, Master: geometrie algorithmique, 9h, Ensimag 3rd year, Grenoble INP.
- F. Hétroy, Licence: algorithmique et structures de donnees, 36h, Ensimag 1st year, Grenoble INP.
- F. Hétroy, supervision of ENSIMAG 2A.
- J.S. Franco, Licence: Algorithmics, 56h, Ensimag 1st year, Grenoble INP
- J.S. Franco, License: C Project, 50h, Ensimag 1st year, Grenoble INP
- J.S. Franco, Master: Research Initiation, 3h, Ensimag 2nd year, Grenoble INP

J.S. Franco, Master: End of study project (PFE) Project Tutoring, 6h, Ensimag 2nd year, Grenoble INP

J.S. Franco, Master: 3D Graphics, 40.5h, Ensimag 2nd year, Grenoble INP

J.S. Franco, Master: Modelisation et programmation C++, 9h, Ensimag 2nd year, Grenoble INP

J.S. Franco, Licence: Introduction to Computer Vision, 27h, Ensimag 1st year, Grenoble INP

L. Reveret, Master: projets image, 30h, Ensimag 2nd year, Grenoble INP

L. Reveret, Master: Multidimensionnal Statistical Analysis, TP, 18h, Ensimag 2nd year, Grenoble INP

L. Reveret, Master: 3D Animation and Maya development, 18h, Ensimag 3rd year, Grenoble INP

L. Reveret, Master: Computer Graphics - Animation, 12h, Ensimag 3rd year, Grenoble INP

9.2.2. Supervision

PhD: Cédric Cagniard, *Motion Capture of Deformable Surfaces in Multi-View Studios*, Université de Grenoble, supervised by Edmond Boyer and Slobodan Ilic, 16/07/12, [1].

PhD: Estelle Duveau, *Motion Measurement of Small Vertebrates*, Université de Grenoble, supervised by Lionel Reveret and Edmond Boyer, 03/12/12, non publically released, patent pending.

PhD: Antoine Letouzey, *Modélisation 4D à partir de plusieurs caméras*, Université de Grenoble, supervised by Edmond Boyer, 30/07/12, [2].

PhD in progress : Benjamin Allain, *Geometry and Appearance Analysis of Deformable 3D shapes*, Université de Grenoble, started 01/10/2012, supervised by J.-S. Franco and E. Boyer.

PhD in progress : Benjamin Aupetit, *Géométrie différentielle discrète et analyse spectrale de maillages spatio-temporels*, Université de Grenoble, started 01/10/2011, supervised by Edmond Boyer and Franck Hêtroy.

PhD in progress: Simon Courtemanche, *Caractérisation des Mouvements en Escalade Sportive par Mesure Video*, Université de Grenoble, started 01/10/2010, supervised by Lionel Reveret and Edmond Boyer.

PhD in progress : Abdelaziz Djelouah, *Gesture Interfaces*, Technicolor-Université de Grenoble, started 01/04/2011, supervised by J.-S. Franco, E. Boyer, F. Leclerc et P. Perez.

PhD in progress : Vagia Tsiminaki, *Appearance Modelling and Time Refinement in 3D Videos*, Université de Grenoble, started 01/10/2012, supervised by J.-S. Franco and E. Boyer.

PERCEPTION Team

9. Dissemination

9.1. Scientific Animation

- Radu Horaud is a member of the following editorial boards:
 - advisory board member of the *International Journal of Robotics Research*,
 - associate editor of the *International Journal of Computer Vision*, and
 - area editor of *Computer Vision and Image Understanding*.
- Radu Horaud was a PC member of the IEEE International Conference on Humanoid Robotics (HUMANOIDS 2012), Osaka, Japan.
- Georgios Evangelidis was a PC member of the ACCV'12 Workshop on Color Depth Fusion for Computer Vision, Dajeon, Korea.
- Xavier Alameda-Pineda organized the D-META challenge in conjunction with the 2012 ACM/IEEE International Conference on Multimodal Interaction, Santa Monica, CA, USA.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Doctorat : Radu Horaud, Data Analysis and Manifold Learning, 30 hours, Université de Grenoble, France

9.2.2. Supervision

PhD: Avinash Sharma, Représentation, Segmentation et Appariement de Formes Visuelles 3D Utilisant le Laplacien et le Noyau de la Chaleur, Grenoble INP, 29 October 2012, Radu Horaud

PhD in progress: Kaustubh Kulkarni, Continuous Action Recognition, November 2009, Radu Horaud

PhD in progress: Jordi Sanchez-Rieira, 3D Human-Robot Interaction with NAO, November 2009, Radu Horaud

PhD in progress: Antoine Deleforge, Sound-Source Separation and Localization, October 2010, Radu Horaud

PhD in progress: Xavi Alameda-Pineda, Audio-Visual Fusion for HRI, October 2010, Radu Horaud

PhD in progress: Maxime Janvier, Sound Recognition for Humanoids, November 2012, Radu Horaud

PRIMA Project-Team

9. Dissemination

9.1. Scientific Animation

James Crowley has served as co-organiser for the Dagstuhl seminar on Human Activity Recognition in Smart Environments, Dagstuhl Castle, Wadern Germany, 3-7 Dec 2012

James Crowley has served as co-organiser for the Symposium Performance Evaluation for Tracking and Surveillance, PETS 2013, IEEE Winter Meeting, Clearwater Florida, January 2013.

James Crowley has served as a member of the program committee for the following conferences:

ICRA 2012, IEEE International Conference on Robotics and Automation, Saint Paul, Minn, 14-18 May 2012.

ICPR 2012, 21st International Conference on Pattern Recognition, Tsukuba Science City, JAPAN, November 11-15, 2012

CVPR 2012, IEEE Conference on Computer Vision and Pattern Recognition, Providence Rhode-Island, 16-21 June 2012.

Sabine Coquillart has served as a member of the program committee for the following conferences:

GRAPP'2012 - International Conference on Computer Graphics Theory and Applications - Rome Italy, Feb. 2012.

VisGra 2012 - International Workshop on Computer Vision and Computer Graphics - Reunion Island, Feb. - March 2012.

IEEE 3DUI 2012 - IEEE 3D User Interfaces - OrangeCounty, USA, March 2012.

WSCG 2012 - International Conferences in Central Europe on Computer Graphics, Visualization and Computer Vision - Prague, Czech Republic, 2012.

SVR 2012 - Symposium on Virtual and Augmented Reality - Brazil , May 2012.

CASA 2012 - International Conference on Computer Animation and Social Agents, Singapore, May 2012.

CGI 2012 - Computer Graphics International, June 2012.

ISVC 2012 - International Symposium on Visual Computing - Rethymnon, Crete, Greece, July 2012.

CGVCVIP 2012 - IADIS Computer Graphics, Visualization, Computer Vision and Image Processing, Lisbon, Portugal, July 2012.

VSMM 2012 - 18th International Conference on Virtual Systems and Multimedia, Milan Italy, Sept. 2012.

ICVRV 2012 - International Conference on Virtual Reality and Visualization 2012, Ginhuangdao, China, September 2012.

JVRC 2012 - Joint Virtual Reality Conference on Virtual Reality of EGVE - ICAT - EuroVR, Madrid, Spain, October 2012.

GRAPHICON'2012 - International Conference on Computer Graphics and Vision - Moscow, Russia, October 2012.

EUROMED 2012 - International Conference on Cultural Heritage, Lemesos, Cyprus, Oct. Nov. 2012.

ISMAR 2012 - IEEE International Symposium on Mixed and Augmented Reality - Atlanta, Georgia, USA, Nov. 2012 (reviewer). CGAG 2012 - Computer Graphics, Animation and Game, Kangwondo, Korea, December 2012

Sabine Coquillart has served as a member of the Conference Committee and International Program Committee co-chair of IEEE VR 2012 - IEEE Virtual Reality, Orange County, CA, USA, March 2012. She has served as co-chair for the 2012 Joint Virtual Conference of EGVE - ICAT - EuroVR, Madrid, Spain, October 2012.

Sabine Coquillart is:

Elected member of the EUROGRAPHICS Executive Committee.

Member of the EUROGRAPHICS Working Group and Workshop board.

Member of the 2012 Joint Virtual Reality Conference of EGVE -ICAT- EuroVR Best Papers Award Committee.

Member of the steering committee for the ICAT conference - International Conference on Artificial Reality and Telexistence.

Chairing the steering committee for the EGVE Working Group - EUROGRAPHICS Working group on Virtual Environments.

Member of the FET pool of experts for European Commission funding under the framework of FET Open.

Sabine Coquillart did evaluation for the Eurographics PhD Awards Committee, 2012. She participated to the following Journal Editorial Boards:

IEEE Transactions on Visualization and Computer Graphics: co-guest editor with S. Feiner and K. Kiyokawa of a special issue (vol. 18 n. 4, 2012).

Journal of Virtual Reality and Broadcasting.

Presence: Teleoperators & Virtual Environments Journal: co-Guest Editor for some papers of a special issue.

Scientific World Journal.

Thierry Fraichard has served as an Associate Editor ¹ for three international conferences:

IEEE Int. Conf. on Robotics and Automation (ICRA), St Paul (US), May 2012.

IEEE-RSJ Int. Conf. on Intelligent Robots and Systems (IROS), Vilamoura (PT), Oct. 2012.

IFAC Symp. on Robot Control (SYROCO), Dubrovnik (HR), Sep. 2012.

He has reviewed an article for the Autonomous Robots journal and has served as an expert evaluator for the French Research Agency and the European Commission (FP7 framework). Along with James Kuffner from CMU, he has edited a special issue on guaranteed motion safety for the Autonomous Robots journal.

Patrick Reignier has served as a Program Committee member for the following conferences:

Reconnaissance des Formes et Intelligence Artificielle (RFIA 2012), Lyon, France.

6th International Conference on Ubiquitous Computing and Ambient Intelligence (UCAmI 2012), Vitoria-Gasteiz, Spain.

First Workshop on the Rights and Duties of Autonomous Agents (RDA2).

Workshop Affect, Compagnon Artificiel, Interaction (WACAI 2012) Grenoble, France.

He has reviewed articles for:

ACM Transactions on Interactive Intelligent Systems.

Assistance and Service Robotics in a Human Environment workshop of IROS 2012.

He has been elected at the board of the Association Française pour l'Intelligence Artificielle (AFIA). He was a member of the selection committee for a Professor Position at the Joseph Fourier University and a member of the selection committee for a Professor Position at the Pierre et Marie Curie University.

¹An Associate Editor has to handle the review process of a set of papers, i.e. assign reviewers, assess each paper and write the review reports.

Dominique Vaufreydaz has served as a Program Committee member for the following conferences:

UBICOMM 2012, The Sixth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies, Barcelona, Spain, September 2012.

MTEL2012 at ISM2012, The Seventh IEEE International Workshop on Multimedia Technologies for E-Learning in conjunction with the IEEE International Symposium on Multimedia 2012, Irvine (CA), USA, December 2012.

He has reviewed articles for:

International Journal On Advances in Internet Technology, November 2012.

IEEE International Conference on Robotics and Automation, Karlsruhe, Germany, May 2013.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master: Sabine Coquillart, Virtual Reality and 3D User Interfaces, M2 MOSIG, Univ. of Grenoble, France.

Master: Sabine Coquillart, 3D User Interfaces and Augmented Reality, one day, M2 Numerical Modeling and Virtual Reality, Univ. of Laval, France.

Master: James Crowley is co-responsible for the Master of Science in Informatics at Grenoble (MoSIG).

Master: James Crowley teaches the MoSIG M1 Cours - Intelligent Systems.

Master: James Crowley teaches the MoSIG M2 Cours - Computer Vision.

Master: Alexandre Demeure, Introduction à l'IHM, 45h eqTD, M1 MIAGE, UJF, France.

Master: Alexandre Demeure, IHM avancées, 26h eqTD, M2 MIAGE, UJF, France.

Master: Alexandre Demeure, Introduction à l'IHM, 36h eqTD, M1 RICM4, Polytech, France.

Master: Alexandre Demeure, Architecture pour l'IHM, 26h eqTD, M2 RICM5, Polytech, France.

Master: Alexandre Demeure, IHM avancées, 15h eqTD, M2 RICM5, UJF, France.

Licence: Thierry Fraichard, Introduction à la robotique, 19h eqTD, L3 INFO, Univ. of Grenoble, France.

Licence: Thierry Fraichard, Projet Java, 20h eqTD, L3 MIAGE, Univ. of Grenoble, France.

Master: Thierry Fraichard, Introduction to Perception and Robotics, 23h eqTD, M1 MOSIG, Univ. of Grenoble, France.

Master: Thierry Fraichard, Projet Génie Logiciel, 36h eqTD, M1, ENSIMAG/Grenoble INP, France.

Master: Patrick Reignier, Projet Génie Logiciel, 55h eqTD, M1, ENSIMAG/Grenoble INP, France.

Licence: Patrick Reignier, Projet C, 20h eqTD, L3, ENSIMAG/Grenoble INP, France.

Master: Patrick Reignier, Programmation Internet, 18h eqTD, M1, ENSIMAG/Grenoble INP, France.

Master: Patrick Reignier, Programmation C, 65h eqTD, M2, Université Joseph Fourier, France.

Master: Patrick Reignier, Produits Structuré (informatique pour la finance), 24h eqTD, M2, ENSIMAG/Grenoble INP, France.

Licence: Dominique Vaufreydaz, Traitement de texte et tableur pour l'économie, 48h eqTD ,L1, Grenoble II, France.

Licence: Dominique Vaufreydaz, Informatique appliquée à l'économie et à la gestion, enseignement à distance, Licence, Grenoble II, France.

Licence: Dominique Vaufreydaz, Pratique avancée du Tableur, 72 h eqTD, L3, Grenoble II, France.

Licence Professionnelle: Dominique Vaufreydaz, Enquêtes et traitement d'enquêtes avec le logiciel Sphinx, 11h eqTD, Licence pro Métiers de l'Emploi et de la Formation, 11h eqTD, Grenoble II, France.

Licence Professionnelle: Dominique Vaufreydaz, Administration Windows, 39.5h eqTD, Licence pro Métiers de l'Emploi et de la Formation, Grenoble II, France.

Master: Dominique Vaufreydaz, Enquêtes et traitement d'enquêtes avec le logiciel Sphinx, 11h eqTD, M2 Strategies économiques du sport et du tourisme, Grenoble II, France.

Master: Dominique Vaufreydaz, Pratique avancée du Tableur, 22 h eqTD, M1 Économie internationale et stratégies d'acteurs, Grenoble II, France.

Master: Dominique Vaufreydaz, Mise à niveau Informatique pour l'économie, 22h eqTD, M2 Diagnostic économique d'entreprise, Grenoble II, France.

9.2.2. Supervision

PhD : Mathieu Guillame-Bert, Learning Temporal Association Rules on Symbolic Time Sequences, Thesis defended December 2012, Thesis Director James Crowley

PhD : Antoine Meler, BetaSAC et OABSAC, Deux Nouveaux Echantillonnages Conditionnels pour RANSAC, Thesis defended January 2013, Thesis Director James Crowley

PhD in progress : Marion Decrouez, Modelisation et Localisation Visuelle dans les Environnement Dynamiques, Thesis Directed by Frédéric Devernay and James Crowley, Soutenance PrŽvu mars 2013,

PhD in progress : Evanthia Mavridou, Visual Invariants for Detection and Recognition, Thesis Director James Crowley

PhD in progress : Varun Jain, Perception of Human Emotions. Thesis Director James Crowley

PhD in progress : Julian Quiroga, Visual Perception of Gestures, Thesis Directed by Frédéric Devernay and James Crowley

PhD : Emeric Fontaine, Programmation d'espace intelligent par l'utilisateur final, UJF, July 2012, Joelle Coutaz et Alexandre Demeure.

PhD in progress : Dimitri Masson, Modèles et outils pour favoriser la créativité dans les premières phases de conception d'IHM, Gaelle Calvary et Alexandre Demeure

PhD: Alessandro Renzaglia, Distributed Control for Autonomous Helicopters, Univ. of Grenoble, France, April 2012, Thierry Fraichard and Agostino Martinelli.

PhD: Marco Polo Cruz Ramos, Design of Interaction Systems for Mobile Robots Collaboration; a Marsupial Robot Team for Search and Rescue Operations Case Study, Tecnológico de Monterrey, Mexico, December 2012, Jose-Luis Gordillo and Thierry Fraichard.

PhD: Rémi Barraquand, Designing Sociable Technologies, February 2nd 2012, Univ. of Grenoble, James Crowley and Patrick Reignier.

9.2.3. Juries

Thierry Fraichard (reviewer), PhD, Jim Mainprice, Univ. of Toulouse (FR), December 2012.

Patrick Reignier (examiner), PhD, Charbel El Kaed, Univ. of Grenoble, January 13th. 2012

Patrick Reignier (reviewer), HDR, Cédric Buche, National Engineering School of Brest, France, February 10th 2012.

Patrick Reignier (examiner), PhD, Michelle Leonhardt Camargo, Universidade Federal do Rio Grande do Sul, Brasil, March 13th 2012.

Patrick Reignier (examiner), PhD, Issac Noé Garcia Garza, Grenoble University, June 18th 2012.

Patrick Reignier (examiner), PhD, Cyrille Martin, Univ. of Grenoble, October 4th 2012.

WAM Project-Team

8. Dissemination

8.1. Scientific Animation

Cécile Roisin is a member of the steering committee of the [ACM Symposium on Document Engineering](#).

N. Layaïda is a member of Inria Grenoble-Rhône-Alpes Committee for Employment of Scientists: Inria hiring of Post-docs, Delegates and Secondments.

N. Layaïda, is program committee member of the 2nd International Conference on Model & Data Engineering (MEDI'2012). 3-5 October 2012. Poitiers, Futuroscope - France.

P. Genevès and N. Layaïda are program committee members of ACM Symposium on Document Engineering. 4-7 September 2012. Telecom ParisTech. Paris.

P. Genevès is a permanent member of Inria Grenoble-Rhône-Alpes Committee for Technological Development: Inria hiring of Research Engineers.

In 2012, P. Genevès has been a referee for the following international journals: ACM Transactions on Database Systems, Data & Knowledge Engineering, and Theoretical Computer Science.

In 2012, C. Roisin has been a referee for the following international conferences: ACM Multimedia 2012, ACM Document Engineering, and WWW2012 Demo Track.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Licence: Computer Networks, 190h/year, L2, University of Grenoble – C. Roisin

Licence: Logic, 45h/year, L3, University of Grenoble – N. Gesbert

Licence: C Programming project, 12h/year, L3, University of Grenoble – N. Gesbert

Master: Logic, 22h30/year, M1, University of Grenoble – N. Gesbert

Master: Web development, 22h30/year, M1, University of Grenoble – N. Gesbert

Master: Software analysis, conception and validation, 45h/year, M1, University of Grenoble – N. Gesbert

Master: Foundations for XML: logics and automata, 18h/year, M2 (Mosig), University of Grenoble – P. Genevès

Master: SIGAL Multimedia systems and web languages, 9h/year, M2 (Mosig), University of Grenoble – N. Layaïda

8.2.2. Supervision

PhD: M. Chekol, Static analysis of semantic web queries, Université de Grenoble, 19 December 2012, N. Layaïda and J. Euzenat

PhD in progress: N. Guido, Satisfiability for Expressive μ -calculi, since October 2012, C. Roisin and P. Genevès

PhD in progress: M. Junedi, Query-Update Independence Analysis under Constraints, since October 2012, C. Roisin and N. Layaïda

8.2.3. Juries

PhD: B. Baccot, 23 November 2012, University of Toulouse (C. Roisin as reviewer).

PhD: T.N. Luong, 12 December 2012, University of Pau (C. Roisin as reviewer).

8.3. Popularization

J. Lemordant and N. Layaïda have contributed to **Inriality** by a short video entitled Voyager dans le temps. Paris. November 2012.

J. Lemordant, N. Layaïda and V. Quint have contributed to the Forum 4i (Innovation, Industrie, Investissement, International), Grenoble, 2012. We showcased indoor navigation with IXE.

J. Lemordant has participated in several events to popularize recent results in the areas of pedestrian navigation and mixed reality, namely the 6th European eAccessibility Forum and the State Of The Map 2012 conference.