Activity Report 2014

Section Dissemination

ASAP Project-Team

9. Dissemination

9.1. Promoting scientific activities

Davide Frey served in the program committees of the following conferences:

13th IEEE International Conference on Peer-to-Peer Computing (P2P), London, England, Sep 2014.

ACM/IFIP/USENIX International Conference on Middleware (Middleware), Bordeaux, France, Dec 2014.

Middleware for Next Generation Internet Computing (MW4NG), Bordeaux, France, Dec 2014.

34th International Conference on Distributed Computing Systems (ICDCS), Madrid, Spain, Jul 2014.

IEEE International Parallel & Distributed Processing Symposium (IPDPS), Phoenix, Arizona, USA, May 2014.

George Giakkoupis organized the *Workshop on Randomized Algorithms for Distributed Computing and Networks (RADICON)*, Rennes, France, Jul 2014.

George Giakkoupis served in the program committees of the following conferences:

21st International Colloquium on Structural Information and Communication Complexity (SIROCCO), Takayama, Japan, Jul 2014.

28th International Symposium on Distributed Computing (DISC), Austin, TX, USA, Oct 2014.

George Giakkoupis served in the conference committee of the *ACM Symposium on Principles of Distributed Computing (PODC)*, Paris, France, Jul 2014.

Anne-Marie Kermarrec is a member of the *Academia Europea* since 2013.

Anne-Marie Kermarrec is a member of the scientific committee of the *Société Informatique de France*.

Anne-Marie Kermarrec is a member of the *Inria scientific board (Bureau du comité des projets)* in Rennes.

Anne-Marie Kermarrec was the chair of the *ACM Software System Award Committee* in 2014.

Anne-Marie Kermarrec is a member of the *ACM Software System Award Committee* since 2009.

Anne-Marie Kermarrec is a member of the *ERC panel for Consolidator Grants* since 2013.

Anne-Marie Kermarrec is an associate editor of *IEEE Internet Computing*.

Anne-Marie Kermarrec is an associate editor of the *Springer Computing Journal*.

Anne-Marie Kermarrec was a member of the hiring committee at EPFL in 2014.

Anne-Marie Kermarrec is the vice-chair of *ACM Eurosys*.

Anne-Marie Kermarrec served in the program committees of the following conferences:

International Conference on Distributed Computing Systems (ICDCS), Madrid, Jul 2014.

International Conference on Extending Database Technology (EDBT), Athens, Greece, Mar 2014.

International Colloquium on Automata, Languages and Programming (ICALP), Copenhaguen, Sweden, Jul 2014.

ACM/IFIP/USENIX International Conference on Middleware (Middleware), Bordeaux, France, Dec 2014.

International Conference on Networked Systems (NETYS), Marrakech, Morocco, May 2014.

ACM Eurosys, Amsterdam, The Netherlands, Apr 2014.

ACM International Systems and Storage Conference (SYSTOR), Haifa, Israel, Jun 2014.

International Conference on Distributed Computing Systems (ICDCS), Madrid, Jul 2014.

International Conference on Extending Database Technology (EDBT), Athens, Greece, Mar 2014.

Anne-Marie Kermarrec is a member of the steering committees of *ACM Eurosys*, *Middleware*, and the *Winter School on Hot Topics in Distributed Systems*.

Anne-Marie Kermarrec is a member of the technical committee of the *ACM Conference on Online Social Networks*.

Anne-Marie Kermarrec co-organized the *Workshop Inria/Technicolor on Distributed Storage Systems*, Rennes, Dec 2014.

Anne-Marie Kermarrec co-organized the *Web Alter-Ego Workshop*, EPFL, Lausanne, Swizerland, Jan 2014.

Anne-Marie Kermarrec participated in the Forum Liberation de Rennes, Apr 2014.

Anne-Marie Kermarrec wrote two articles on the gender gap in computer science: (i) *Informatique [nom feminin]*, on the blog of the SIF Binaire on Mar 2014 (http://binaire.blog.lemonde.fr/2014/03/07/informatique-nom-feminin-2/); (ii) *Computer Science: Too young to fall into the gender gap*, IEEE Internet Computing [15].

Michel Raynal was in the editorial board of the journals: *IEEE Transactions on Computers*, *Journal of Parallel and Distributed Computing*, *Journal of Computer Systems Science and Engineering*, *Foundations of Computing and Decision Sciences*.

Michel Raynal served as a PC co-chair of the *International Conference on Networked Systems (NETYS)*, Marrakech, Morocco, May 2014.

Michel Raynal served in the program committee of the *ACM Symposium on Principles of Distributed Computing (PODC)*, Paris, France, Jul 2014.

Michel Raynal was the Award chair of the *IEEE Symposium on Reliable Distributed Systems (SRDS)* 2014.

Michel Raynal was a *European Representative in the IEEE Technical Committee on Distributed Computing*.

Michel Raynal was an international liaison co-chair of *ICDCS 2013*.

François Taïani served in the program committees of the following conferences:

34rd International Conference on Distributed Computing Systems (ICDCS), Madrid, Spain, Jun 2014.

33rd IEEE Symposium on Reliable Distributed Systems (SRDS), Nara, Japan, Oct 2014.

14th International IFIP Conference on Distributed Applications and Interoperable Systems (DAIS), Berlin, Germany, Jun 2014.

François Taïani served as PC Co-Chair of the *15th ACM/IFIP/USENIX Middleware Conference (Middleware)*, Dec 2014, Bordeaux, France.

François Taïani is a member of the Steering Committee of the *International IFIP Conference on Distributed Applications and Interoperable Systems (DAIS)* since 2013.

Juan Manuel Tirado Martin was a program co-chair of the conferences:

17th IEEE International Conference on Computation Science and Engineering (CSE), Chengdu, China, 2014.

6th IEEE International Conference on Cloud Computing Technology and Science (Cloud-Com), Singapore, 2014.

Middleware for Next Generation Internet Computing (MW4NG), Bourdeaux, France, 2014.

9.2. Invited talks

George Giakkoupis. *Rumor spreading and graph expansion*. CS and SE Seminar, Concordia Univ., Montreal, Canada, Mar 10 2014.

Anne-Marie Kermarrec. *Privacy-preserving distributed collaborative filtering*. Lecture at NICTA, Sydney, Australia, Jan 2014.

Anne-Marie Kermarrec. *Catch me if you can: Privacy-preserving micro-blogging*. Workshop on Distributed Systems, Univ. of Sydney, Jan 2014.

Anne-Marie Kermarrec. Scalable infrastructures for personalization. Morgenstern Colloquium, Inria Sophia-Antipolis, Apr 2014.

Anne-Marie Kermarrec. *Privacy-preserving distributed collaborative filtering*. Spring School METIS 2014, Marrakech, May 2014.

Anne-Marie Kermarrec. *Scalable Infrastructures for Personalization: from and ERC Grant to a startup*. Symposium on the Future of Cloud Computing, EIT-ICT Labs, Rennes, Jun 2014.

Anne-Marie Kermarrec. *Scalable infrastructures for personalization*. Yandex, Moscow, Jun 2014

Anne-Marie Kermarrec. *Scalable infrastructures for personalization*. MPI SWS Distinguihed Lecture, Saarbrucken, Nov 2014.

Michel Raynal. *What can be computed in a distributed system?* Workshop "From Programs to Systems: The Systems Perspective in Computing" in honor of Turing Award Winner Professor Joseph Sifakis, Apr 2014.

Michel Raynal. *From Turing to the clouds (on the computability power of distributed systems)*. 21th International Colloquium on Structural Information and Communication Complexity (SIROCCO), Jul 2014.

9.3. Teaching, supervision, juries

9.3.1. Teaching

Licence (bachelor) courses:

Simon Bouget, APF (Algorithmique et Programmation Fonctionnelle), 40 HEQTD (2 x 10 séances de 2 heures de TP), L1, Univ. Rennes 1 (ISTIC), France.

Davide Frey, Scalable Distributed Systems, 10 hours, M1, EIT/ICT Labs Master School, Univ. Rennes 1, France.

Davide Frey, Scalable Distributed Systems, 5 hours, M2, Univ. Rennes 1, France.

Michel Raynal, Introduction to distributed computing, 20h, M1, Univ. Rennes, France.

Michel Raynal, Distributed Computability, 20h, M2, Univ. Rennes, France.

François Taïani, Introduction to Operating Systems, 16h, 1st year of Engineering School (L3), ESIR / Univ. Rennes 1, France.

Master courses:

François Taïani, Synchronization and Parallel Programming, 48h, 2nd year of Engineering School (M1), ESIR / Univ. Rennes 1, France.

François Taïani, Distributed Systems, 48h, 3rd year of Engineering School (M2), ESIR / Univ. Rennes 1, France.

François Taïani, Programming Technologies for the Cloud, 32h, M2, Univ. Rennes 1, France.

9.3.2. Supervision

PhD: Arnaud Jégou. *Harnessing the power of the implicit and explicit social networks through decentralization.* Sep 23 2014. Supervised by Davide Frey and Anne-Marie Kermarrec.

PhD in progress: Fabien André. *Calcul sur des données hétérogènes et modifiables dans les plateformes à large-échelle.* Started Nov 18 2013. Supervised by Anne-Marie Kermarrec (and Nicolas Le Scouarnec).

PhD in progress: Simon Bouget. *EMILIO: Emergent MIddleware for extra-Large-scale self adaptatIOn.* Started Sep 1 2014. Supervise by François Taïani

PhD in progress: Resmi Ariyattu Chandrasekharannair. *Towards decentralized federations for plug-based decentralized social networks.* Started Dec 1 2013. Supervised by François Taïani.

PhD in progress: Stéphane Delbruel. *Towards a decentralized embryomorphic storage System.* Started Oct 1 2013. Supervised by François Taïani and Davide Frey (since Oct 1 2014).

PhD in progress: Ali Gouta. *Caching and prefetching for efficient video services in mobile networks.* Started Jan 2 2012. Supervised by Anne-Marie Kermarrec (and Yannick Le Louédec).

PhD in progress: Nupur Mitall. *Infrastructure et algorithmes pour la recommandation de contenus cross application.* Started Dec 1 2013. Supervised by George Giakkoupis and Anne-Marie Kermarrec.

PhD in progress: Javier Olivares. *Web-Alter-Egos Platform: A peer-sourcing infrastructure for personalized privacy-aware event processing.* Started Sep 1 2013. Supervised by Anne-Marie Kermarrec.

PhD in progress: Antoine Rault. *Privacy through decentralization.* Started Oct 1 2012. Supervised by Davide Frey and Anne-Marie Kermarrec.

PhD in progress: Pierre-Louis Roman. *Epidemic distributed convergence for decentralized social networking.* Started Oct 1 2014. Supervised by Davide Frey and François Taïani.

PhD in progress: Julien Stainer. *Calculabilité distribuée.* Started Oct 1 2011. Supervised by Michel Raynal.

9.3.3. Juries

Anne-Marie Kermarrec was a member of the PhD juries for:

Ercan Ucan. *Data storage, transfers and communications in personal clouds.* ETH, Zurich, Feb 28 2014.

Oana Gog. *Matching user accounts across online social networks: Methods and application.* Univ. Paris 6, May 21 2014.

Abdelberi Chaabane. *Online social networks: Is it the end of privacy?.* Univ. Grenoble, May 22 2014.

Anne-Marie Kermarrec was a member of the HDR jury for Xavier Bonnaire. *Adaptabilité dans les systèmes répartis à large-échelle.* Univ. Paris 6, Jul 2014.

François Taïani was a member of the PhD juries for:

Bassem Debbabi. *Cube: A decentralised architecture-based framework for software self-management.* Univ. Grenoble (LIG), Jan 28 2014.

Adel Noureddine. *Towards a better understanding of the energy consumption of software systems.* Univ. Lille 1 (LIFL / Inria Lille), Mar 19 2014.

Romaric Ludinard. *Caractérisation locale de fautes dans les systèmes large échelle.* Univ. Rennes 1 (Inria Rennes - Bretagne Atlantique), Oct 2 2014.

François Taïani was a member of the HDR juries for:

Sébastien Gambs. *Respect de la vie privée dans la société de l'information.* Univ. Rennes 1, Jun 23 2014.

Yérom-David Bromberg. *Towards interoperable distributed systems* Univ. Bordeaux, Nov 28 2014.

ATLANMOD Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. Member of the organizing committee

The AtlanMod team has coorganized the following events:
- A. Gómez was publicity co-chair for the 10th European Conference on Modelling Foundations and Applications (ECMFA 2014).
- M. Tisi has coorganized the Scalable Model Driven Engineering Workshop (BigMDE'14) within the STAF federated conference.
- J. Cabot coorganized the CloudMDE workshop within the MoDELS Conference and was the demo co-chair for the International Conference on Web Engineering (ICWE)

8.1.2. Scientific events selection

8.1.2.1. Chair of conference program committee

J. Cabot was the PC Cochair for the 10th European Conference on Modelling Foundations and Applications (ECMFA 2014)

8.1.2.2. Member of the conference program committee

Participation to conference program committees/boards:
- Jordi Cabot:
  – International: International Conference on Model-Driven Engineering Language and Systems, European Conference on modeling foundations and applications, International Conference on Web Engineering, International Conference on Advanced Information Systems Engineering, International Conference on Model Transformations, Automated Software Engineering Conference, OCL workshop.
  – National: French national conference on MDE, Spanish national conference on MDE.
- Massimo Tisi:
  – International: International Conference on Model Transformation (ICMT2014), Software Language Engineering conference (SLE2014 - Industrial Track), Transformation Tool Contest (TTC2014), International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM2014)
- Gerson Sunye:
  – International: International Conference on Model Transformation (ICMT2014), International Conference on Software Engineering and Knowledge Engineering, International Workshop on Large-Scale Testing, International Workshop on Testing The Cloud.
- Salvador Martínez:
  – International: Metamodelling for Healthcare Systems (MMHS) Workshop
- Javier Canovas:
  – International: European Conference on Modelling Foundations and Applications, International Conference on Web Engineering, International Conference on Model Driven Engineering Languages and Systems, International Conference on Automated Software Engineering, Workshop on Modeling Social Media
- Abel Gómez:
  – International: 23rd International Conference on Information Systems Development.
- Hugo Bruneliere:
  – International: 8th Symposium on the Maintenance and Evolution of Service-Oriented Systems and Cloud-Based Environments

8.1.2.3. Reviewer
- Abel Gómez:
  - International: 40th International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2015) (external reviewer).

8.1.3. Journal

8.1.3.1. Member of the editorial board

Jordi Cabot is on the editorial board of the Journal of Object Technology and Software and Systems Modeling journals

8.1.3.2. Reviewer

AtlanMod members have collaborated in the reviewing process for the following journals this year
- Javier Canovas: Software and Systems Modeling Journal.
- Jordi Cabot: IEEE Software, IEEE Transactions on Software Engineering Journal, Journal of Systems and Software, Information and Software Technology Journal, Software and Systems Modeling Journal, Science of Computer Programming journal, Journal of Software: Evolution and Process
- Massimo Tisi: Transactions on Software Engineering Journal (TSE), Journal of Logic and Algebraic Programming (JLAP), Journal of Software: Evolution and Process (JSEP), NeuroComputing, Journal on Web Engineering (JWE)
- Gerson Sunyé: Transactions on Software Engineering Journal (TSE), IBM Journal of Research and Development, Journal of System and Software, Distributed Computing Journal, Software: Practice and Experience Journal.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

License: M. Tisi, Projet Integrateur PRIME, 12h, L3, Ecole des Mines de Nantes

License: M. Tisi, Projet IPIPIP, 8h, L3, Ecole des Mines de Nantes

Master: M. Tisi, Bases de Données, 30h, M1, Ecole des Mines de Nantes

Master: M. Tisi, Interaction Homme-Machine, 14h, M1, Ecole des Mines de Nantes

Master: M. Tisi, Model-Driven Engineering II, 45h, M2, Ecole des Mines de Nantes, Formation par Apprentissage

Master: M. Tisi, Sensibilisation Recherche, 12h, M2, Ecole des Mines de Nantes, Formation par Apprentissage

Master: J. Cabot, Model-Driven Engineering I, 45h, M2, Ecole des Mines de Nantes, Formation par Apprentissage

Master: G. Sunye, Model-Driven Engineering, 30h, M2, Université de Nantes

Master: G. Sunye, Software Engineering, 48h, M1, Université de Nantes

Master: G. Sunye, Software Testing, 48h, M1, Université de Nantes

Master: G. Sunye, Software Development, 24h, M1, Université de Nantes

License: S. Martínez, Bases de Données, 28h, L3, Ecole des Mines de Nantes

License: S. Martínez, Interaction Homme-Machine, 14h, L3, Ecole des Mines de Nantes

Master: S. Martínez, Master MIAGE - Model Transformations, 6h, Université de Nantes

License: S. Martínez, Domain Specific Languages, 3h, L3, Ecole des Mines de Nantes

8.2.2. Supervision

MSc: Pau Martí: Generación de Familias de Documentos en DPL: Soporte a componentes parcialmente instanciados, Universitat Politècnica de València, September 2014, M. Carmen Penadés and Abel Gómez.

PhD in progress: Ahmed Ezzat Labib, Automatic reconstruction and analysis of semantic network security policies from deployed security components, Universitat Politècnica de València, José H. Canós, Abel Gómez

PhD in progress: Amine Benellanem, Scalability of model transformations, Jordi Cabot, Massimo Tisi and Gerson Sunye.

PhD in progress: Gwendal Daniel, Efficient storage of large models, Jordi Cabot, Massimo Tisi and Gerson Sunye.

PhD in progress: Michel Albonico, Model-driven testing of cloud environments, Jordi Cabot and Gerson Sunye.

PhD in progress: Mohamed Boussaa, An Architecture for Testing Large-Scale Dynamic Distributed Systems, Université de Rennes 1, Benoit Baudry, Olivier Barais, Gerson Sunyé.

PhD in progress: Kevin Corre, Model-based Trust, Université de Rennes 1–Orange, Olivier Barais, Gerson Sunye, Jean-Michel Crom, Vincent Frey

PhD : Carlos A. González, Pragmatic Model Verification, Jordi Cabot. Thesis defended on October 2014

PhD : Salvador Martínez Pérez, Automatic reconstruction and analysis of semantic network security policies from deployed security components, Jordi cabot and Frédéric Cuppens. Thesis defended on July 2014

8.2.3. *Juries*

Jordi Cabot was a reviewer for the thesis of Jokin Garcia (Basque Country University), Oscar Sanchez (University of Murcia) and Eugene Doma (University of Sydney) and member of the jury for the thesis of David Aguilera (Technical University of Catalonia).

Massimo Tisi was a member of the ph.d. jury of Mehdi IRAQI HOUSSAINI (Arts et métiers ParisTech).

Gerson Sunyé was a member of the Ph.D jury of Jorge Augusto Meira (University of Luxembourg).

8.3. Popularization

In January 2014 the team participated to the Rencontres Inria - Industrie on the theme Répondre aux Défis de L'Ingénierie Logicielle, in which we notably presented our MoDisco project and collaboration [0]. The seminar had many participants from both industry and academia. Moreover, since several years, the AtlandMod team is already very involved in the open source community, notably via its constant activity within the context of the Eclipse Foundation. This activity actually takes different forms: creation and leading/development of Eclipse projects (under *Eclipse.org* or *Eclipse Labs*), participation to the major worldwide community events (i.e.; EclipseCon North America, EclipseCon Europe and EclipseCon France), organization of events targeting the local community (i.e. Eclipse DemoCamps), etc. This year again, the team has been active and visible in terms of concrete contributions to the community. The main remarkable items are the following ones:

- Leading of the MDT MoDisco project (Hugo Bruneliere), the Eclipse reference project concerning model-driven reverse engineering;

- Commitment to other projects directly under *Eclipse.org*: MMT ATL and EMFT EMF Facet (Hugo Bruneliere);

- Commitment to other projects under *EclipseLabs*: EMFToCSP (Jordi Cabot, Carlos Gonzalez) and EMF Views (Juan David Villa Calle, Jokin Garcia Perez, Hugo Bruneliere);

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[0]http://videos.rennes.inria.fr/InriaMeito/index-HugoBruneliere.html

- Creation and development of a new incubation project under *Eclipse Labs*: Collaboro (Javier Canovas);

- Publication of a paper about our experience and feedback on developing and promoting open source projects in Eclipse [23], presented during the Open Source Software for MDE workshop at MODELS 2014 Conference (Hugo Bruneliere and Jordi Cabot);

- Presentation of talks during two main Eclipse events (Hugo Bruneliere): at EclipseCon North America 2014 about EMF Views [36], at EclipseCon France 2014 about Neo4EMF [35].

- In the context of the ARTIST EU collaborative project, we are strongly involved in the official ARTIST Open Source Release [0], notably by developing and making available several (MoDisco-based) model discovery components from Java and SQL.

Generally, the team visible presence under Eclipse is also an efficient way to continue active collaborations with industrial partners, such as Mia-Software (Sodifrance) on MoDisco - EMF Facet, and Obeo on ATL.

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[0]http://www.artist-project.eu/open-source-package

CIDRE Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. member of the organizing committee

Nicolas Prigent served as a member of the organization committees of the following conferences and workshops:

- SSTIC 2014 (Symposium sur la Sécurité des Systèmes d'Information et des Réseaux 2014).
- VizSec 2014 (Visualization for Cyber-Security), official workshop of IEEE VIS 2014.

Frédéric Tronel served as a member of the organization committee of the following conference:

- SSTIC 2014 (Symposium sur la Sécurité des Systèmes d'Information et des Réseaux 2014).

Ludovic Mé served as a member of the organization committee of the following conference:

- C&ESAR 2014 (Computers & Electronics Security Applications Rendez-vous).

9.1.2. Scientific events selection

9.1.2.1. member of the conference program committee

Emmanuelle Anceaume served as a member of the program committees of the following conferences:

- 14th IEEE International Conference on Computer and Information Technology (CIT-2014), 11-13 September 2014
- 13th IEEE International Conference on Ubiquitous Computing and Communications (IUCC-2014), 19-21 December, 2014
- 13th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom). September 24th-26th, 2014.

Sébastien Gambs served as a member of the program committees of the following conferences and workshops:

- 6th IEEE International Workshop on SEcurity and SOCial Networking (SESOC 2014), 28 March 2014, Budapest, Hungary.
- 9ème Conférence sur la Sécurité des Architectures Réseau et des Systèmes d'Information (SAR-SSI 2014), 13-16 May 2014, Saint-Germain-Au-Mont-d'Or, France.
- 10th European Dependable Computing Conference (EDCC 2014), 13-16 May 2014, Newcastle Upon Tyne, UK.
- IEEE ICC 2014 - Communication and Information Systems Security Symposium, 10-14 June 2014, Sydney, Australia.
- 5ème Atelier sur la Protection de la Vie Privée (APVP 2014), 15-18 June 2014, Cabourg, France.
- 12th Annual Conference on Privacy, Security and Trust (PST 2014), 23-24 July 2014, Toronto, Canada.
- IEEE Workshop on Privacy and Anonymity in Digital Economy (PADE 2014), September, Edmonton, Canada.
- 9th DPM International Workshop on Data Privacy Management (DPM 2014), 10 September 2014, Wroclaw, Poland.
- 5th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2014), 22-25 September, Halifax, Canada.
- 15th Joint IFIP TC6 and TC11 Conference on Communications and Multimedia Security (CMS 2014), 25-26 September 2014, Aveiro, Portugal.
- 7th International Symposium on Foundations & Practice of Security (FPS 2014), 3-5 November 2014, Montréal, Canada.

Michel Hurfin was a member of the program committee of

- the 6th IEEE International Symposium on UbiSafe Computing (UbisSafe 2014) in conjunction with the 13th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom 2014), 24-26 September 2014, Beijing, China. http://trust.csu.edu.cn/conference/ubisafe2014/
- the 12th African Conference on Research in Computer Science and Applied Mathematics (CARI'2014), 16-23 October, 2014, Saint Louis, Senegal. http://www.cari-info.org/
- the 6th International Workshop on Workflow Management in Cloud and Big Data (WMCB 2014) in conjunction with the International Conference on Big Data and Cloud Computing (BDCloud 2014), 3-5 December 2014, Sydney, Australia. http://wmcb2014.sinaapp.com/index.html

J.-F. Lalande served as a member of the program committees of the following conferences and workshops:

- International Conference on Emerging Security Information, Systems and Technologies (IARIA SECURWARE 2014)
- International Conference on High Performance Computing & Simulation (IEEE HPCS 2014)
- International Conference on High Performance and Communications (IEEE HPCC 2014)
- International Workshop on Methods for Establishing Trust with Open Data (IEEE METHOD 2014)
- International Workshop on Security and High Performance Computing Systems (Workshop SHPCS 2014)
- International Workshop on Secure Peer-to-Peer Intelligent Networks & Systems (Workshop SPINS 2014)

Nicolas Prigent served as a member of the program committees of the following conferences and workshops:

- SSTIC 2014 (Symposium sur la Sécurité des Systèmes d'Information et des Réseaux 2014).
- VizSec 2014 (Visualization for Cyber-Security), official workshop of IEEE VIS 2014.

Guillaume Piolle served as a member of the program committees of the following conferences and workshops:

- First International Workshop on Agents and CyberSecurity (ACySe 2014). https://sites.google.com/site/acyseaamas2014/home
- 16ème Colloque CREIS-TERMINAL. http://www.lecreis.org/?p=1789
- 9ème Conférence sur la Sécurité des Architectures Réseau et des Systèmes d'Information (SAR-SSI 2014). http://sarssi14.liris.cnrs.fr/

Eric Totel was a member of the program committee of:

- the 6th IEEE International Symposium on UbiSafe Computing (UbisSafe 2014) in conjunction with the 13th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom 2014), 24-26 September 2014, Beijing, China. http://trust.csu.edu.cn/conference/ubisafe2014/

Frédéric Tronel was a member of the program committee of:

- SSTIC 2014 (Symposium sur la Sécurité des Systèmes d'Information et des Réseaux 2014).

Gilles Guette served as a member of the program committees of the following conferences:

- 1st International Conference on Information Systems Security and Privacy (ICISSP-2015), 9-11 February 2015,
- 9ème Conference sur la Sécurité des Architectures Réseaux et des Systèmes d'information (SARSSI 2014), 13-16 mai 2014.

Christophe Bidan was a member of the program committees of the following conferences and workshops:

- the Fourth International Workshop on Information Systems Security Engineering (WISSE 2014), in conjunction with the 26th International Conference on Advanced Information Systems Engineering (CAiSE'14), 17th June 2014, Thessaloniki, Greece. http://gsya.esi.uclm.es/WISSE2014/
- the 10th International Conference on Security and Privacy in Communication Networks (SecureComm2014), September 24–26, 2014 Beijing, China. http://securecomm.org/2014/show/home/

Ludovic Mé served as a member of the program committee of the following conference:

- ACNS 2014 (Applied Cryptography and Network Security),
- CARI 2014 (Conférence Africaine sur la recherche en Informatique),
- C&ESAR 2014 (Computers & Electronics Security Applications Rendez-vous),
- SAR-SSI 2014 (Conférence sur la Sécurité des Architectures Réseaux et des Systèmes d'Information),
- WESSI 2014 (Workshop sur l'Enseignement de la Sécurité des Systèmes d'Information).

9.1.2.2. reviewer

- Sébastien Gambs acts as an external reviewer for EDBT 2014, DSN 2014 and PETS 2014.
- Michel Hurfin acts as a reviewer for the following conferences: UbiSafe 2014 and CARI'2014.

9.1.3. Journal

9.1.3.1. member of the editorial board

- Sébastien Gambs is member of the editorial board of the International Journal of Data Mining, Modelling and Management and a member of the editorial board of the International Journal of Privacy and Health Information Management.
- Michel Hurfin belongs to the editorial board of the Springer open access journal of Internet Services and Applications (http://www.springer.com/computer/communications/journal/13174).

9.1.3.2. reviewer

- Emmanuelle Anceaume served as a reviewer for the Journal of Parallel and Distributed Computing and the Transactions on Parallel and Distributed Systems Journal.
- Sébastien Gambs served as reviewer for the following journals: Nature Communications, Pervasive and Mobile Computing, Neurocomputing, IEEE Internet Computing and Journal of Selected Topics in Signal Processing.
- Michel Hurfin acts as a reviewer for the following journals: IEEE Transactions on Computers (TC) and Springer Journal of Internet Services and Applications (JISA).
- Guillaume Piolle acts as a reviewer for the following journals: International Journal of Information Security (IJIS), Interstices.
- Gilles Guette acts as a reviewer for the journal Security and Communication Networks and Sensor Networks Journal.
- Nicolas Prigent acts as a reviewer for the Lavoisier TSI journal and the SAR-SSI 2014 conference.
- Ludovic Mé acts as a reviewer for the following journals: IEEE Transactions on Network and Service Management, and Logical Methods in Computer Science.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master 2: Emmanuelle Anceaume, responsable du module BIB, 35 h. equiv. TD

Master: Sébastien Gambs, *Protection of Privacy*, 16 hours of lectures, M2 - Master Pro SSI, Université de Rennes 1, France.

Master: Sébastien Gambs, *Topics on Authentication*, 16 hours of lectures, M2 - Master Pro SSI, Université de Rennes 1, France.

Master: Sébastien Gambs, *Introduction to Computer Security*, 8 hours of lectures and 4 hours of practical works, M2 - Master Pro SSI, Université de Rennes 1, France.

Licence: Eric Totel, *Models and programming languages*, 19.5 hours including 10.5 hours of lecture, L3 - first year of the engineer degree, Supélec, France

Licence: Eric Totel, *Foundations of computer science, data structures and algorithms*, 6 hours, L3 - first year of the engineer degree, Supélec, France

Master: Eric Totel, *Computer systems architecture*, 30 hours, M1 - second year of the engineer degree, Supélec, France

Master: Eric Totel, *C language*, 24 hours including 6 hours of lecture, M2 - master CS (Cyber Security), Supélec, France

Master: Eric Totel, *C language and C++ language*, 12 hours including 6 hours of lecture, M2 - third year of the engineer degree, Supélec, France

Master: Eric Totel, *Dependability* , 9 hours including 7.5 hours of lecture, M2 - third year of the engineer degree and master research, Supélec, France

Master: Eric Totel, *Dependability*, 3 hours of lecture, M2 - third year of the engineer degree (ingénierie des systèmes automatisés), Supélec, France

Master: Eric Totel, *Intrusion Detection*, 6 hours of lecture, M2 - M2 - mastère spécialisé CS (Cyber Security), Supélec, France

Master: Eric Totel, *Intrusion Detection*, 8 hours of lecture, M2 - master 2 degree, University of Rennes 1, France

Master: Eric Totel, *Intrusion Detection*, 4 hours of lecture, M2 - master 2 degree, University of Rennes 1, France

Master: Eric Totel, *Supervision of student project* , 4 projects, M1 - second year of the engineer degree, Supélec, France

Master: Eric Totel, *Supervision of student project*, 1 project, M2 - third year of the engineer degree, Supélec, France

Licence: Frédéric Tronel, *Software engineering*, 40h30, L3 - first year of the engineer degree, Supélec, France.

Master: Frédéric Tronel, *Operating systems*, 18h, M2 - third year of the engineer degree, Supélec, France .

Master: Frédéric Tronel, *Compilers*, 26h, M2 - third year of the engineer degree, Supélec, France.

Master: Frédéric Tronel, *Automatic reasoning*, 8h, M2 - third year of the engineer degree, Supélec, France.

Master: Frédéric Tronel, *Buffer overflow vulnerabilities (theory and practice)*, 16h30, M2 - third year of the engineer degree, Supélec, France.

Master: Frédéric Tronel, *Buffer overflow vulnerabilities (theory and practice)*, 7h30, M2 - third year of the engineer degree, Telecom Bretagne, France.

Master: Frédéric Tronel, *Firewall*, 7h30, M2 - third year of the engineer degree, Supélec, France.

Master: Frédéric Tronel,*Calculability in distributed systems*, 9h, M2, jointly with University of Rennes 1 and Supélec, France.

Licence: Guillaume Piolle, *Programming models and languages*, 18 hours, L3 - first year of the engineering degree, Supélec, France;

Licence: Guillaume Piolle, *Foundations of computing, data structures and algorithms*, 31.5 hours, L3 - first year of the engineering degree, Supélec, France;

Licence: Guillaume Piolle, *Software engineering*, 24 hours, L3 - first year of the engineering degree, Supélec, France;

Master: Guillaume Piolle, *Modelling, algorithms and programming*, 23.7 hours, M1 - second year of the engineer degree, Supélec, France;

Master: Guillaume Piolle, *Computer security and privacy for the engineer*, 6 hours, M1 - second year of the engineer degree, Supélec, France;

Master: Guillaume Piolle, *Security policies*, 4.5 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Guillaume Piolle, *Network supervision in Java*, 3 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Guillaume Piolle, *Computer networks*, 3 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Guillaume Piolle, *C++/Qt*, 12 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Guillaume Piolle, *Symbolic artificial intelligence*, 4.5 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Guillaume Piolle, *Network access protection*, 6 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Guillaume Piolle, *Web development*, 9 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Guillaume Piolle, *Privacy protection*, 4.5 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Guillaume Piolle, *Privacy protection*, 2.25 hours, course for computing high school teachers, Académie de Rennes, France;

Master: Guillaume Piolle, *Discovering Tor*, 1.5 hours, course for computing high school teachers, Académie de Rennes, France;

Doctorat: Guillaume Piolle, *Privacy and data protection*, 9 hours, doctoral course, Matisse doctoral school, France;

Licence: Nicolas Prigent, *Models and programming languages*, 19.5 hours including 12 hours of lecture, L3 - first year of the engineer degree, Supélec, France.

Licence: Nicolas Prigent, *Foundations of computer science, data structures and algorithms*, 12 hours, L3 - first year of the engineer degree, Supélec, France.

Master: Nicolas Prigent, *Operating systems*, 18h, M2 - third year of the engineer degree, Supélec, France.

Master: Nicolas Prigent, *Automatic reasoning*, 8h, M2 - third year of the engineer degree, Supélec, France.

Master: Nicolas Prigent, *Web development*, 12 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Nicolas Prigent, *Applied Cryptography*, 4,5 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Nicolas Prigent, *Python Programming*, 6 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Nicolas Prigent, *Advanced Java Programming*, 1,5 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Nicolas Prigent, *Penetration Testing*, 12 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Nicolas Prigent, *IDS and Visualization*, 2 hours, M2, ESIR, France.

Master: Nicolas Prigent, *Virtualization and Cloud Computing*, 4 hours, M2, ESIR, France.

Master: Nicolas Prigent, *MS Windows Configuration and Administration*, 16 hours, Mastère CS - Specialization year, Supélec Campus de Rennes, France.

Master: Nicolas Prigent, *MS Windows Configuration and Administration*, 8 hours, CQP - Specialization year, Supélec Campus de Gif, France.

Master: Nicolas Prigent, *Cryptography, Cryptographic Protocols and Applications*, 16 hours, CQP - Specialization year, Supélec Campus de Gif, France.

Master: Nicolas Prigent, *Supervision of student project* , 2 projects, M1 - second year of the engineer degree, Supélec, France.

Master: Nicolas Prigent, *Supervision of student project*, 2 project, M2 - third year of the engineer degree, Supélec, France.

Master: Nicolas Prigent, *Supervision of student project*, 1 project, Mastère CS - Specialization year, Supélec, France.

Master: Gilles Guette, *Infrastructure Network*, 22 hours, M2 - third year of the engineer degree, ESIR, France;

Master: Gilles Guette, *Network Security*, 18 hours, M2 - third year of the engineer degree, ESIR, France;

Master: Gilles Guette, *Network and System Security*, 15 hours, M2 - third year of the engineer degree, ESIR, France;

Master: Gilles Guette, *Network Dimensionning*, 6 hours, M2 - third year of the engineer degree, ESIR, France;

Master: Gilles Guette, *Network Administration*, 50 hours, second year of the engineer degree, ESIR, France;

Master: Gilles Guette, *Mobile Network*, 5 hours, second year of the engineer degree, ESIR, France;

Master: Gilles Guette, *Network Routing*, 35 hours, second year of the engineer degree, ESIR, France;

Master: Gilles Guette, *Supervision of student Project*, 3 projects, third year of the engineer degree, ESIR, France;

Master: Gilles Guette, *Supervision of student Project*, 2 projects, second year of the engineer degree, ESIR, France;

Master: Jean-Francois Lalande, *Programmation orientée objet avancée: Java*, 16 hours, M2 - third year of the engineer degree, INSA Centre Val de Loire, France;

Master: Jean-Francois Lalande, *Atelier Sécurité Android*, 2 days, master degree students of ENSA de Kénitra (conférence CISSI 2014) and ENSA de Khouribga (conférence CISTIC 2014), Maroc;

Licence: Christophe Bidan, *Programming models and languages*, 18 hours, L3 - first year of the engineering degree, Supélec, France;

Licence: Christophe Bidan, *Network and Operating Systems*, 6 hours, L3 - second year of the engineering degree, Supélec, France;

Master: Christophe Bidan, *Introduction to security*, lab work (4h30), M2 - third year of the engineer degree, Supélec, France

Master: Valérie Viet Triem Tong, *Games Theory*, 18 hours, M1 - second year of the engineering degree, Supélec, France;

Master: Valérie Viet Triem Tong, *Certified Programming using Coq*, 9 hours, M2 - third year of the engineering degree, Supélec, France;

Master: Valérie Viet Triem Tong, *Intrusion detection using information flow control*, 9 hours, M2 / third yearof the engineering degree, Supélec, France;

Master: Valérie Viet Triem Tong, *Small elements of decidability*, 7h30 hours, M2 - third year of the engineering degree, Supélec, France;

Licence: Ludovic Mé, *Software Engineering*, 15h, L3 - first year of the engineer degree, Supélec, France

Master: Ludovic Mé, *Introduction to Computer Security and Privacy*, 6.75 hours, M1 - second year of the engineer degree, Supélec, France

Master: Ludovic Mé, *Information systems*, 6 hours, M1 - second year of the engineer degree, Supélec, France

Master: Ludovic Mé, *Supervision of student project*, 1 project, M1 - second year of the engineer degree, Supélec, France

Master: Ludovic Mé, *Supervision of student project*, 1 project, M2 - third year of the engineer degree, Supélec, France

Master: Ludovic Mé is responsible for the module "Secured information systems", M2 - third year of the engineer degree, Supélec, France

Licence: Guillaume Hiet, *Models and programming languages*, 11 hours, L3 - first year of the engineer degree, Supéˊlec, France

Licence: Guillaume Hiet, *Foundations of computer science, data structures and algorithms*, 15 hours, L3 - first year of the engineer degree, Supéˊlec, France

Master: Guillaume Hiet, *Computer security and privacy for the engineer*, 10 hours including 4,5 hours of lecture, M1 - second year of the engineer degree, Supéˊlec, France

Master: Guillaume Hiet, *Buffer overflow vulnerabilities*, lab work (16h), M2 - third year of the engineer degree, Supélec.

Master: Guillaume Hiet, *Pentest*, lab work (9h00), M2 - third year of the engineer degree, Supélec, France

Master: Guillaume Hiet, *Introduction to Linux*, lab work (3h), M2 - mastère CS (Cyber Security), Supélec, France

Master: Guillaume Hiet, *Java Security*, lecture (3h), M2 - mastère CS, Supélec, France

Master: Guillaume Hiet, *Linux Security*, lab work (6h), M2 - mastère CS , Supélec, France

Master: Guillaume Hiet, *Linux Security*, lecture (3h) and lab work (3h), third year of the engineer degree, Supélec, France

Master: Guillaume Hiet, *Intrusion Detection*, lecture (6h) and lab work (6h), M2 - mastère CS, Supélec, France

Master: Guillaume Hiet, *Intrusion Detection*, lecture (3h) and lab work (6h), M2 - third year of the engineer degree, M2 research degree of University of Rennes 1, Supélec

Master: Guillaume Hiet, *Intrusion Detection*, lecture (8h) and lab work (12h), M2, University of Rennes 1, France

Master: Guillaume Hiet, *Intrusion Detection*, lecture (4h) and lab work (6h), M2 - third year of the engineer degree, ESIR, France

Master: Guillaume Hiet, *Intrusion Detection*, 6 hours of lecture, M2, Université de Limoges, France

Master: Guillaume Hiet, *Firewall*, lecture (4h), M2, University of Rennes 1, France

Master: Guillaume Hiet, *Supervision of student project*, 4 projects, M1 - second year of the engineer degree, Supélec, France

Master: Guillaume Hiet, *Supervision of student project*, 1 project, M2 - third year of the engineer degree, Supélec, France

9.2.2. Supervision

HdR: Sébastien Gambs, Protection de la vie privée dans la Société de l'Information, Université de Rennes 1, 23 June 2014.

PhD: Romaric Ludinard, Caractérisation locale de fautes dans les systèmes large échelle, Université Rennes I, Defense: 02/10/2014, Emmanuelle Anceaume and Bruno Sericola

PhD: Radoniaina Andriatsimandefitra, Caractérisation et détection de malware Android basées sur les flux d'information, SUPELEC, Defense: 15/12/2014, Valérie Viet Triem Tong and Ludovic Mé.

PhD: Georges Bossert, Exploiting Semantic for the Automatic Reverse Engineering of Communication Protocols, SUPELEC, Defense: 17/12/2014, Guillaume Hiet and Ludovic Mé.

PhD in progress: Mounir Assaf, "Calcul de propriétés dans des programmes C de grande taille", supervised by Eric Totel (50%) and Frederic Tronel (50%);

PhD in progress: Laurent Georget, "Formal validation of an information flow monitor", started in October 2014, supervised by Valérie Viet Triem Tong (25%), Frédéric Tronel (25%), Guillaume Piolle (25%) and Mathieu Jaume (25%);

PhD in progress: Erwan Godefroy, "Corrélation d'alertes dirigée par la connaissance de l'environnement", started in November 2012, supervised by Eric Totel (50%), Ludovic Mé (30%), and Michel Hurfin (20%);

PhD in progress: Mouna Hkimi, "Détection d'intrusion dans les systèmes distribués", started in October 2013, supervised by Eric Totel (50%) and Michel Hurfin (50%);

PhD in progress: Paul Lajoie-Mazenc, "Privacy preserving reputation system in large scale and self organizing systems", started in october 2012, supervised by Emmanuelle Anceaume (50%) and Valérie Viet Triem Tong (50%);

PhD in progress: Pierre Obame, "Dependability issues in large scale systems", started in February 2012, supervised by Emmanuelle Anceaume (50%) and Frédéric Tronel (50%);

PhD in progress: Regina Paiva Melo Marin, "Privacy protection in distributed social networks", started in November 2011, supervised by Christophe Bidan (20%) and Guillaume Piolle (80%).

PhD in progress: Simon Boche, "Réputation et respect de la vie privée dans les réseaux auto-organisé", started in September 2012, supervised by Christophe Bidan (30%), Gilles Guette (35%) and Nicolas Prigent (35%);

PhD in progress: Florian Grandhomme, "Études de protocoles de routage dynamique externe de type BGP dans un environnement réseaux tactiques adhoc mobiles : faisabilité, performances, qualité de service, et passage à l'échelle", started in October 2014, supervised by Adlen Ksentini (25%), Gilles Guette (50%) and Thierry Pless (25%);

PhD in progress: Christopher Humphries, "Visualisation d'évènements de sécurité", started in December 2011, supervised by Christophe Bidan (20%) and Nicolas Prigent (80%).

PhD in progress: Deepak Subramanian, "Multi-level Information Flow Monitoring", started in January 2013, supervised by Christophe Bidan (20%) and Guillaume Hiet (80%).

PhD in progress: Julien Lolive, "Entwining identification and privacy mechanisms", started in December 2012, supervised by Caroline Fontaine (50% - Télécom-Bretagne) and Sébastien Gambs (50%).

PhD in progress: Solenn Brunet, "Privacy-preserving location-based services", started in October 2014, supervised by Sébastien Gambs (50%) and Jacques Traoré (50% - Orange Labs Caen).

PhD in progress: Antoine Guellier, "Utilisation de la cryptographie homomorphe pour garantir le respect de la vie privée", started in October 2013, supervised by Christophe Bidan (50%) and Nicolas Prigent (50%).

Some members of the team also participate to the supervision of external PhD students. Sébastien Gambs is co-supervising Raghavendran Balu (PhD student for LinkMedia, Inria Rennes) and Moussa Traore (PhD student from LAAS-CNRS, Toulouse).

9.2.3. *Juries*

- Emmanuelle Anceaume was a member of the PhD committee for the PhD of Nagham Alhadad entitled "Bridging the gap between social and digital worlds: system modeling and trust evaluation", prepared at LINA, Nantes, June 20th 2014.
- Michel Hurfin was a member of the PhD committee (reviewer) for the PhD of Linda Zeghache entitled 'Tolérance aux pannes dans les systèmes d'agents mobiles transactionnels', prepared at Université des sciences et de la Technologie Houari Boumediene (USTHB), Algeria, April 27th 2014.
- Jean-François Lalande was a member of the PhD committee for the PhD of Nicolas Moro entitled "Sécurisation de programmes assembleur face aux attaques visant les processeurs embarqués", prepared at Université Pierre et Marie Curie, Paris, November 13rd 2014.
- Eric Totel was a member of the PhD committee (reviewer) for the PhD of Aurélien Wailly entitled "Architecture de bout en bout et mécanismes d'autoprotection pour les environnements Cloud", prepared at Telecom Sud Paris, Paris, September 30th 2014.
- Christophe Bidan was a member of the PhD committee (reviewer) for the PhD of Nesrine Kaaniche entitled "Cloud Data Storage Security based on Cryptographic Mechanisms", prepared at Telecom Sud Paris, Paris, December 15th 2014.
- Christophe Bidan was a member of the HDR committee (examiner) for the HDR of Julien Iguchi-Cartigny entitled "Contributions à la sécurité des Java Card", prepared at Université de Limoges, Limoges, December 4th, 2014.
- Sébastien Gambs was a member of the jury of the Gilles Kahn PhD award for 2014. This award is given each to the best French PhD thesis in computer science.
- Ludovic Mé was a member of the PhD committee (president) for the PhD of Romaric Ludinard entitled "Caractérisation locale de fautes dans les systèmes large échelle", prepared at Université de Rennes 1, Rennes, October 2nd 2014.
- Eric Totel was a member of the mid-term evaluation committee of Vincent Laporte (PhD student of the university of Rennes), July 2014.
- Ludovic Mé was a member of the mid-term evaluation committee of Florent Marchand de Kerchove (PhD student of the university of Nantes), June 2014.
- Emmanuelle Anceaume was a member of the mid-term evaluation committee of Nicolo Rivetti (PhD student of the university of Nantes), June 2014.
- Sébastien Gambs was a member of the mid-term evaluation committee of George Nassopoulos (PhD student of the university of Nantes), June 2014.
- Michel Hurfin was a member of the mid-term evaluation committee of Ghada Arfaoui (PhD student of the university of Orléans, Cifre Orange Labs), January 2014.
- Christophe Bidan was a member of the mid-term evaluation committee of Mickaël Salaun (PhD student of Telecom Sud Paris), March 2014.
- Christophe Bidan was a member of the mid-term evaluation committee of Malek Belhaouane (PhD student of Telecom Sud Paris), March 2014.

9.3. Popularization

Guillaume Piolle has participated to two scientific popularization activities, both oriented towards secondary education pupils. In both cases, his participation consisted in presentations about the objectives, methods and results of research activities in computer security and privacy (including, but not limited to our activities in CIDRE):

- *Les cordées de la réussite* : national program aimed at facilitating access to higher education for pupils from various social backgrounds ;
- *A la découverte de la recherche* : local program aimed at providing high school pupils with insights of research issues and activities.

Nicolas Prigent made a Tutorial Presentation at OSSIR Bretagne dealing with Visualization for Security.

Sébastien Gambs has participated to the event "A la découverte de le recherche", in which he did five presentations in high school in order to raise the awareness of teenagers on privacy issues related to information technologies and to explain them the research on this topic.

COAST Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. Organizing committee membership

- Claudia-Lavinia Ignat was member of the organizing committee of the workshop IWCES (International Workshop on Collaborative Editing Systems) in 2014 in conjunction of CSCW 2014 conference.

8.1.2. Scientific events selection

8.1.2.1. Chair of conference program committee

Co-organisation of the first ISCRAM MED conference on Information Systems for Crisis Response and Management in Mediterranean countries in Toulouse http://irit.fr/ISCRAMMED2014/

- Olivier Perrin was demonstration program co-chair of ICSOC 2014

8.1.2.2. Conference program committee membership

- Claude Godart was member of the conference program committee of BPM (Business Process Management), BPMDS (Business Process Modeling, Development and Support), CBI (IEEE Conference on Business Informatics), IEEE CLOUD Computing, EDOC (The enterprise computing conference), ESOCC (European Services Oriented and Cloud Computing), ICSOC (International Conference on Services Oriented Computing), ICWS (IEEE International Conference on Web Services), Inforsid, RCIS (Research challenges in Information Systems), and SCC (IEEE International Conference on Services Computing) conferences.
- Claudia-Lavinia Ignat was or is a PC member of CSCW (International Conference on Computer Supported Cooperative Work and Social Computing) 2015 and 2016, SIGMOD Demo 2014 and CDVE (International Conference on Cooperative Design, Visualization and Engineering) 2014
- Olivier Perrin was PC Member of ICSOC 2014, I3E 2014 (13th IFIP Conference on e-Business, e-Services and e-Society), VECOS (8th International Workshop on Verification and Evaluation of Computer and Communication Systems) 2014, SITIS 2014, KASA (International Workshop on Knowledge Aware Service Oriented Applications) 2014, WSS (Web Service Symposium) 2014
- François Charoy was PC Member of ICEBE (International Conference on Business Engineering) 2014, CTS 2014 (International Symposium on Collaborative Technologies and Systems), DG.O (International Conference on Digital Government Research) 2014, IEEE International Conference on Business Information Systems and of several workshops.
- Gérald Oster was a PC member of CoopIS 2014 (International Conference on Cooperative Information Systems).

8.1.3. Journal

8.1.3.1. Editorial boards membership

- Claude Godart is member of the editorial board of "IEEE transaction on Service Computing", "International Journal of Services Computing", "International Journal of Cloud Computing" and "International Journal of E-adoption".
- Claudia-Lavinia Ignat is member of the editorial board of Journal of CSCW (Computer Supported Cooperative Work).

- François Charoy is member of the editorial board of Service Oriented Computing and Applications Journal (Springer).

8.1.3.2. Reviewer

- Claude Godart was member of the review board of the "International Journal of Next Generation Computing".
- Claudia-Lavinia Ignat reviewed in 2014 papers for Concurrency and Computation: Practice and Experience journal.
- François Charoy reviewed papers for ACM Transaction on the Web and IEEE Transactions on Network and Service Management.
- Olivier Perrin reviewed papers for Transactions on Services Computing.
- Gérald Oster reviewed paper in Oxford Computer Journal.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Permanent members of the Coast team are leading teachers in their respective institutions. They are responsible of lecture in disciplines like software engineering, database systems, object oriented programming and design, distributed systems, service computing and even more advanced topics at all levels and in all kind of departments in the University. Most of the PhD Students have also teaching duties in the same institutions. As a whole, the Coast team accounts for more than 2500 hours of teaching. Members of the Coast team are also deeply involved in the pedagogical and administrative life of their departments.

- Gérôme Canals is the head of the Computer science department of the Nancy University Institute of Technology (IUT Nancy Charlemagne) since sept. 2010, and is responsible for the professional licence degree "Web application programming" since sept. 2001.
- Claude Godart is responsible for the Computer Science department of the engineering school ESSTIN. He was study director of the master degree "Distributed Services, Security and Networks" until September 2013. Claude Godart is member of the board of directors and the recruitment committee of the engineering school ESSTIN.
- Khalid Benali is responsible for the professional Master degree speciality "Distributed Information Systems" of MIAGE and of its international branch in Morocco.
- François Charoy is responsible of the Software Engineering specialisation at the TELECOM Nancy Engineering School of University of Lorraine.
- Gérald Oster is responsible of the 3rd year internship program at the TELECOM Nancy Engineering School of University of Lorraine.
- Pascal Urso is responsible for the "Security, Services, Systems and Network" track of the master degree in computer science at University of Lorraine from September 2013.

8.2.2. Supervision

PhD in progress : Quang Vinh Dang, Trust-based large scale collaboration, started in 10/2014, Claudia-Lavinia Ignat and François Charoy

PhD in progress: Luc André, Réplication et Maintien de la Cohérence en Temps Réel dans les Réseaux Pair-à-pair, started in 9/2011, François Charoy and Gérald Oster

PhD in progress: Mehdi Ahmed Nacer, Title: Evaluation of CRDT for optimistic replication, started in 9/2011, François Charoy and Pascal Urso

PhD in progress: Elio Goettelman, Exécution en confiance de processsus dans le cloud, started in 9/2011, Claude Godart

PhD in progress: Ahmed Bouchami , Sécurité des données collaboratives d'une plateforme PaaS, started in 11/2012, Olivier Perrin

PhD in progress: Adrien Devresse , Study of effective sharing and analysis of very large metadata repositories: application to the High Energy Physics computing community, started on 11/2011, Olivier Perrin

PhD in progress: Jordi Martori i Adrian, Data constraints for large-scale collaboration, started in 10/2013, François Charoy and Pascal Urso

8.2.3. *Juries*

- Claudia-Lavinia Ignat was a member of the jury for the recruitment in 2014 of permanent Inria junior researchers at Inria Nancy-Grand Est.

Coast members were members of the following PhD and HDR defense committees:

- Walid Gaaloul, HDR, Université Pierre et Marie Curie, September 2014 (Claude Godart)
- Kahina Bessai, PhD, Université de Paris 1 Panthéon-Sorbonne, December 2014 (Claude Godart)
- Samuel Kaluvuri, PHD, EURECOM, November 2014 (François Charoy)
- Mohamadou Lamine DIOUF, Université de Rennes, October 2014 (François Charoy)
- Juan Li, PhD, INSA de Lyon (Olivier Perrin)
- Samu Yangui, PhD TELECOM Sud Paris (Olivier Perrin)
- Michael Mrissa, HDR Université de Lyon 1 (Olivier Perrin)

8.3. Institutional commitment

- Claudia-Lavinia Ignat is in charge of European affairs for Inria Nancy Grand-Est. She is the Delegate of International Relations for Inria Nancy-Grand Est. She is member of the Inria Nancy-Grand Est COMIPERS researchers committee. She is member of the Inria Nancy - Grand Est committee for health, safety and working conditions.

8.4. Collective Responsibilities outside Inria

Claude Godart is member of the "Conseil d'administration" and "Commisssion de choix" of the engineering school ESSTIN.

Claude Godart was member of the LIRIS laboratory evaluation committee for the HCERES.

François Charoy is head of the "Commission de choix" of TELECOM Nancy.

Gérald Oster is member of the Administration Council of TELECOM Nancy.

Gérald Oster is member of the "Commission de choix" of TELECOM Nancy.

Olivier Perrin is co-responsible of the "Commission de mention Informatique" of Doctoral School IAEM.

<h2 style="color:red; text-align:center">CTRL-A Exploratory Action</h2>

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. member of the organizing committee

Eric Rutten is

- Workshops chair for the 12th IEEE International Conference on Autonomic Computing, ICAC, July 7-10, 2015 in Grenoble, France http://icac2015.imag.fr ;

- proposing the DCDS 2015 Special Session on Dependable Discrete control for adaptive and reconfigurable computing systems http://www.gdl.cinvestav.mx/dcds2015/submission.html may 2015 ;

- organizer of the two editions of the Grenoble Workshop on Autonomic Computing and Control, 27 may and 4 november 2014 https://persyval-lab.org/en/exploratory-project/staars ;

- organizer, with Thierry Monteil and Khalil Drira (LAAS), of the workshop autonomique, 16 - 17 oct. 2014 au LAAS, Toulouse (invited keynote speaker : Xiaoyun Zhu, VMware) http://projects.laas.fr/autonomique ;

- organizer of the WODES 2014 Special Session on Discrete control for adaptative and reconfigurable computing systems, 14 may 2014 http://wodes2014.lurpa.ens-cachan.fr/special-sessions/ ;

- organizer, with J. Buisson (IRISA), of the Atelier Informatique Autonomique, satellite of the colloque ComPAS 2014, 22 avril 2014, Neuchatel http://compas2014.unine.ch/atelier2 ;

- organizer of the Seminar (Grenoble and Rhône-Alpes region, Lyon, Valence, Annecy) on Supervisory control Techniques for Autonomic, Adaptive and Reconfigurable computing Systems https://team.inria.fr/ctrl-a/members/eric-rutten/labex/staars-seminars-html/

9.1.2. Scientific events selection

9.1.2.1. responsible of the conference program committee

Eric Rutten is program co-chair of the IEEE International Conference on Cloud and Autonomic Computing, CAC 2015, MIT, USA, September 2015 (http://autonomic-conference.org), Part of FAS* - Foundation and Applications of Self* Computing Conferences, Collocated with: the IEEE Self-Adaptive and Self-Organizing System Conference, the IEEE Peer-to-Peer Computing Conference.

9.1.2.2. member of the conference program committee

Eric Rutten is PC member for: 5th IFAC Conference on Analysis and Design of Hybrid Systems (ADHS) October 14-16, 2015, Georgia Tech, Atlanta, Georgia, USA (http://adhs15.gatech.edu ; 12th IEEE International Conference on Autonomic Computing. ICAC 2015, July 7-10, 2015 in Grenoble, France (http://icac2015.imag.fr) ; 5th IFAC international workshop on Dependable Control of Discrete Systems , DCDS, Cancun, Mexico, may 27-29, 2015 (http://www.gdl.cinvestav.mx/dcds2015) ; 6th Workshop on Adaptive and Reconfigurable Embedded Systems (APRES 2014) April 14, 2014, Berlin, Germany ; Collocated with the CPSWeek (http://www.mrtc.mdh.se/apres2014) ; ESLsyn 2014 The 2014 Electronic System Level Synthesis Conference, May 31 - June 1, 2014, San Francisco, CA, USA,co-located with DAC (http://www.ecsi.org/eslsyn)

Nicolas Marchand is PC member for Feedback Computing 2015 10th International Workshop on Feedback Computing Co-located with CPSWeek 2015 April 13th, Seattle, WA, USA (http://cpslab.cs.mcgill.ca/feedbackcomputing15/)

9.1.2.3. reviewer

Eric Rutten, Nicolas Marchand, Bogdan Robu are reviewers for the IFAC World congress 2014.

9.1.3. Journal

9.1.3.1. reviewer

Eric Rutten is reviewer for ACM Transactions on Autonomous and Adaptive Systems ; Science of Computer Programming ; Journal of Systems and Software.

9.1.4. Invited Conferences

- Eric Rutten was invited to give talks at :
    - groupe de travail COSMAL (http://gdr-gpl.cnrs.fr/Groupes/COSMAL), journées du GDR GPL, CNAM Paris du 10 au 13 juin
    - Journée Architectures Logicielles pour la Robotique Autonome, les Systèmes Cyber-Physiques et les Systèmes Auto-Adaptables, 1er décembre 2014, LIP6 Paris (http://www.lirmm.fr/gtcar/index.php/autres-workshop/workshop-cps-gdr-gpl-robotique)
    - 11th International Conference on Distributed Computing and Internet Technology (ICDCIT-2015). (http://www.icdcit.ac.in/), Bhubaneswar, India, February 5–8, 2015.
- Nicolas Marchand, Bogdan Robu were invited to give talks at the Workshop in Cloud Control, May 7 to May 9, 2014, Lund, Sweden (http://www.lccc.lth.se/index.php?page=may-2014-2)

9.2. Teaching - Supervision - Juries

9.2.1. Supervision

- PhD : Soguy Geye ; Coordination Modulaire de Gestionnaires Autonomes par Contrôle Discret ; Université de Grenoble, 3 dec. 2014 ; E. Rutten, N. de Palma (LIG)
- PhD in progress : Adja Ndeye SYLLA ; Generation of coordination rules from an automaton, in the context of the redeployment of distributed contra; applications ; fall 2014 ; E. Rutten, F. Pacull and M. Louvel (CEA)
- PhD in progress : Naweiluo Zhou ; Application-aware policies and control for transactional memory systems ; oct. 2013 ; E. Rutten, G. Delaval, J.F. Mehaut (LIG)
- PhD in progress : Mengxuan Zhao ; Discrete Control in the Internet of things and Smart Environments through a Shared Infrastructure ; nov. 2011 ; E. Rutten, H. Alla (Gipsa-lab), G. Privat (Orange labs)

MIMOVE Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. Member of organizing committee
- Valérie Issarny is member of the Steering Committee of the ESEC/FSE conference.

8.1.1.2. Chair of technical program committee
- Rachit Agarwal is co-chair of the "Advanced and Trusted Internet of Things and Smart City" track in the 12th IEEE International Conference on Advanced and Trusted Computing (ATC 2015);
- Valérie Issarny is co-programme chair of "New Ideas Track" at ESEC/FSE'15 international conference;
- Animesh Pathak is co-chair of the systems track of the IC3'2015 international conference.

8.1.1.3. Member of technical program committee
- Nikolaos Georgantas is PC member of the following international conferences: AmI'14, DATA'14&'15, ICSOFT-EA'14&'15, ICSOFT-PT'14&'15, ANT'14&'15, SOSE'14&'15, HPCC'14, WETICE'15, CBSE'15, ComPAS'15, Projects Showcase event at STAF'15;
- Nikolaos Georgantas is PC member of the following international workshops: MW4NG'14, ARM'14, OrChor'14, SESoS'14&'15, SERENE'14&'15;
- Raphael De Aquino Gomes is PC member of the following international conferences: CSE'14, and CISIS'15;
- Valérie Issarny is PC member of the following international conferences: CBSE'14, Coordination'14&15, ESSOS'14, FASE'15&16, FSE'14, ICDCS'15, ICSE-SEIP Track'14&15, IFIPTM'15, ISPN'15, Middleware'14&15, SEAMS'14;
- Animesh Pathak is PC member of the following international conferences: HPCC'14, EWSN'14, S-Cube'14, and Sensornets'14.

8.1.2. Journal

8.1.2.1. Member of editorial board
- Nikolaos Georgantas is associate editor of the International Journal of Ambient Computing and Intelligence (IJACI);
- Valérie Issarny is associate editor of the Springer JISA Journal of Internet Services and Applications.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Master: Nikolaos Georgantas, "Pervasive Service Oriented Computing" as part of "Services Web et Architectures à bases de services" (SWAS), 18 hours (équivalent TD), niveau M2, University of Versailles Saint-Quentin en Yvelines, France;

Master: Animesh Pathak co-taught a M2 COSY level course on "Web sémantique, contenus et usages" at University of Versailles Saint-Quentin-en-Yvelines in Spring 2014; and

Master: Animesh Pathak gave two three-hour guest lectures at CNAM, Paris as part of a M2 level course on embedded systems in Spring 2014.

8.2.2. Supervision

In 2014, the following students successfully defended their PhD:

Sara Hachem, *Service-Oriented Middleware for the Large-Scale Mobile Internet of Things*, UVSQ-EDSTV, defended in February 2014, advised by A. Pathak and V. Issarny.

Additionally, the following PhD theses are currently in progress at the MiMove team:

> Emil Andriescu, *Synthèse et déploiement dynamiques de protocoles de médiation pour l'interopérabilité dans les environnements collaboratifs nomades*, started October 2012, UPMC-EDITE, CIFRE Inria-Ambientic, advised by Valérie Issarny and Roberto Speicys-Cardoso (Ambientic).

> Benjamin Billet, *Self-adaptive Streaming Middleware for the Internet of Things*, started October 2012, UVSQ-EDSTV, advised by Valérie Issarny

> Georgios Bouloukakis, *Runtime adaptation of middleware connectors for emergent mobile systems*, started October 2013, UPMC-EDITE, advised by Nikolaos Georgantas and Valérie Issarny.

Also, Valérie Issarny is co-advising with Ansgar Radermacher from CEA-LISE, the PhD thesis of Amel Belaggoun on *Adaptabilité et reconfiguration des systèmes temps-réel embarquées*; this is a PhD from UPMC-EDITE with the research being undertaken at CEA-LISE.

8.3. Popularization

- Benjamin Billet was invited to speak at a one-day Android tutorial event organized by the ARAMIS business network at Lyon.

8.4. Other Academic Services

8.4.1. Institutional Commitment

- Nikolaos Georgantas is member of the PhD monitoring committee at Inria Paris-Rocquencourt;
- Nikolaos Georgantas is member of the Inria PhD scholarship selection committee at Inria Paris-Rocquencourt;
- Valérie Issarny is elected member of the *Commission d'Evaluation Inria*;
- Valérie Issarny is scientific coordinator of Inria@Silicon Valley;
- Animesh Pathak served on the Inria assistant selection committee for Lille and Rennes centers.

8.4.2. Collective Responsibilities outside Inria

- Valérie Issarny and Nikolaos Georgantas are members of the IFIP Working Group 2.14/6.12/8.10 on Services-oriented Systems;
- Valérie Issarny is member of the IFSTTAR Scientific Council & "Commission d'évaluation des chercheurs";
- Valérie Issarny is member of the GDR GPL scientific council.

<p align="center" style="color:red">MYRIADS Project-Team</p>

7. Dissemination

7.1. Promoting Scientific Activities

7.1.1. Program committees

Roberto-Gioacchino Cascella   was program committee member of the ORMaCloud 2014 workshop co-located with ACM HPDC, VTC 2015-Spring and VTC 2015-Fall (track "wireless Networks and Security") and in IEEE TrustCom 2015 (track "privacy"). He co-organized the Contrail Business Day held in Roma, Italy on January 23, 2014. He was General co-chair of 2nd edition of DIHC workshop, co-located with Euro-Par 2014, held in Porto, Portugal, on August 26th, 2014.

Eugen Feller   was program committee member of PDP (2014, 2015) and IEEE Cluster 2014.

Yvon Jégou   was program committee member of IEEE TrustCom 2014 conference and ORMaCloud workshop co-located with ACM HPDC 2014.

Christine Morin   was program committee member of the *International Symposium on Parallel and Distributed Computing* (ISPDC) 2014, IEEE *International Parallel & Distributed Processing Symposium* (IPDPS) 2014, IEEE/ACM *International Symposium on Cluster, Cloud and Grid Computing* (CC-GRID) in 2014 and 2015, CLOSER 2014, Resilience (workshop on Resiliency in High Performance Computing in Clusters, Clouds, and Grids) co-located with EuroPar 2014, VTDC (International Workshop on Virtualization Technologies in Distributed Computing) co-located with ACM HPDC in 2015, ScienceCloud co-located with ACM HPDC in 2014 and 2015, OrmaCloud co-located with ACM HPDC 2014, CrossCloud (workshop on cloud interoperability and federation) co-located with INFOCOM in 2014, Distributed Cloud Computing (DCC) workshop co-located with SIGCOMM in 2014, VHPC 2014 and 2015 (workshop on Virtualization in High-Performance Cloud Computing) co-located with EuroPar, Euromicro International Conference on Parallel, Distributed, and Network-Based Processing) (PDP 2015). She is also a member of the SC'15 technical poster committee.

She co-organized the Contrail Business Day held in Roma, Italy on January 23, 2014. She was a member of the scientific committee for the Inria Scientific Days held in Lille in June 2014. She was General co-chair of 2nd edition of DIHC workshop, co-located with Euro-Par 2014, held in Porto, Portugal, on August 26th, 2014. She was *Tutorial Chair* and a mentor in the PhD student mentoring track of the IEEE Cluster conference held in Madrid, Spain, in September 2014.

Anne-Cécile Orgerie   was program committee member of FedICI workshop co-located with EuroPar 2014, of VTC2014-Fall, of CCGrid 2015, and of the PhD student mentoring track of Cluster 2014. She was also general co-chair for ExtremeGreen workshop co-located with CCGrid 2014, general co-chair and organizer for GreenDays@Rennes, and co-organizer of the Inria booth at SuperComputing 2014.

Nikolaos Parlavantzas   was program committee member of DAIS 2014 and CSB 2014.

Guillaume Pierre   was program committee member of Middleware 2014, IC2E 2014, MobileCloud 2014, ComPAS 2014, CloudDP 2014, DADS track of SAC2015, IC2E 2015, AINA 2015 and CSCS20-2015. He was also workshop chair of EuroSys 2014.

Cédric Tedeschi   was a program committee member of ICWS 2014, ICCS 2014, and CloSer 2014.

7.1.2. Evaluation committees, consulting

Yvon Jégou   is a member of the Grid 5000 executive committee. He is a member of the *Comité de Sélection et de Validation (CSV)* of the *Images & Réseaux* cluster.

C. Morin acted as an expert to review ERC starting grant proposals for the European Commission. She is a member of the ModaClouds European project Advisory Board. She is a member of the scientific council of ENS Cachan. She was a member of the jury for the 2014 Inria prizes. She was a consultant for SAFRAN.

Anne-Cécile Orgerie is expert at the HCERES for evaluating the doctoral schools.

Nikolaos Parlavantzas acted as an expert to review proposals for Alpes Grenoble Innovation Recherche (AGIR) 2014.

7.2. Teaching - Supervision - Juries

7.2.1. *Teaching*

Christine Morin is responsible for the Internet of Services: Programming Models & Things and Clouds (ISI) teaching unit of the Master in research in Computer Science of the University of Rennes 1.

Christine Morin:

- Master : Internet of Services: Programming Models & Things and Clouds (ISI), 12 hours ETD, M2RI, University of Rennes 1, France.
- Master : Energy management in computing infrastructures (as part of the Eco-STIC module), 4.5 hours ETD, M1, Supelec, France.

Anne-Cécile Orgerie (at ENS de Rennes):

- License 3: ARCSYS2 - architecture et systèmes 2 (60 hours ETD)

Nikolaos Parlavantzas (at INSA Rennes):

- 4th year: Operating Systems (40 hours ETD)
- 4th year: Big Data and Applications (25 hours ETD)
- 4th year: Networking and SOA (12 hours ETD)
- 4th year: Advanced Operating Systems (12 hours ETD)
- 4th year: Parallel programming (12 hours ETD)
- 4th year: Software Development Project (30 hours ETD)
- 5th year: Component-based Software Engineering (16 hours ETD)

Jean-Louis Pazat is responsible for the following graduate teaching Modules: Advanced operating Systems, Parallel Computing, Networking and SOA.

Jean-Louis Pazat (at INSA Rennes for 2012-2013):

- 4th year: Advanced Operating Systems (32 hours ETD)
- 4th year: Parallel Programming (48 hours ETD)
- 4th year: Networking and SOA (48 hours ETD)
- 4th year: Software development project (60 hours ETD)

Guillaume Pierre (at the University of Rennes 1):

- License 3: Systèmes (25 hours ETD)
- License 3: Organisation et utilisation des systèmes d'exploitation 2 (67 hours ETC)
- Master 2: Techniques de développement logiciel dans le Cloud (39 ETD)
- Master 1: Service Technologies (24 ETD)
- Master 2: Approche algorithmique des applications et systèmes répartis (32 ETD)

Cédric Tedeschi (at the University of Rennes 1 for 2013-2014):
- Master 1: Multitask Operating Systems (65 hours ETD)
- Master 1: Concurrency in Systems and Networks (70 hours ETD)
- Master 1: Parallel Programming (36h ETD)
- Master 1: Service Techonologies (30h ETD)
- Master 2 (research): Internet of Services (6 hours ETD)
    E-learning

    Cédric Tedeschi is reponsible for the Operating Systems class within the eMiage online teaching program.

7.2.2. Supervision

PhD : Djawida Dib, Optimizing PaaS Provider Profit under SLA constraints, defended on July 7th 2014, Christine Morin, Nikolaos Parlavantzas.

PhD in progress : Ancuta Iordache, Multi-resource optimization for application hosting in heterogeneous clouds, started in February 2013, Guillaume Pierre.

PhD in progress: Yunbo Li, Resource allocation in a Cloud partially powered by renewable energy sources, stared in October 2013, Anne-Cécile Orgerie, Jean-Marc Menaud (Ascola).

PhD in progress: Ismael Cuadrado Cordero, Energy-efficient and network-aware resource allocation in Cloud infrastructures, started in October 2013, Christine Morin, Anne-Cécile Orgerie.

PhD in progress: Édouard Outin, A multi-objective adaptation system for the management of a Distributed Cloud, started in October 2013, Olivier Barais (Triskell), Yvon Jégou, Jean-Louis Pazat.

PhD in progress: Sabbir Hasan, SLA Driven Cloud autoscaling for optimizing energy footprint, started in December 2013, Thomas Ledoux (Ascola), Jean-Louis Pazat.

PhD in progress: Anna Giannakou, A Self-adaptable Security Supervision System for Clouds, started in March 2014, Christine Morin, Jean-Louis Pazat, Louis Rilling.

PhD in progress: Bruno Stevant, Resource allocation strategies for service distribution at the Internet edge to optimize end-to-end latency, started in December 2014, Jean-Louis Pazat.

7.2.3. Juries

- Christine Morin is a reviewer of the HdR committee of Brice Goglin, University of Bordeaux (April 15th, 2014).
- Christine Morin is a member (chair) of the PhD defense committee of Arnab Sinha, Université de Rennes 1 (May 28th 2014).
- Christine Morin is a reviewer in the PhD defense committee of Jonathan Lejeune, University of Paris 6 (September 19th, 2014).
- Christine Morin is a member (chair) of the PhD defense committee of Alessandro Ferreira Leite, University of Paris 11 (December 2nd, 2014).
- Christine Morin is a reviewer of the HdR committee of Jacques Jorda, University of Toulouse 3 - Paul Sabatier (December 11th, 2014).
- Guillaume Pierre is a member of the PhD defense committee of Wubin Li, University of Umea (April 25th 2014).
- Guillaume Pierre is a member of the PhD defense committee of Cassidy Clark, TU Delft (May 14th 2014).
- Guillaume Pierre is a member of the PhD defense committee of Pierpaolo Cincilla, Université Paris 6 (September 15th 2014).
- Anne-Cécile Orgerie is a member of the PhD defense committee of Guillaume Le Louët, Ecole des Mines de Nantes (May 12th 2014)

- Nikolaos Parlavantzas is a member of the PhD defense committee of Chrysostomos Zeginis, University of Crete (October 20th, 2014)
- Jean-Louis Pazat is a reviewer for the PhD thesis of the PhD thesis of Alessandro Leite (December 2, 2014)
- Jean-Louis Pazat is the president of the Habilitation defense of Olivier Barais, Université de Rennes 1 (December 8th 2014)

7.3. Popularization

- Roberto-Gioacchino Cascella presented a demonstration of the VEP-S system at the EIT ICT Labs result day, Helsinki, Finland, December 2014.
- Christine Morin gave a talk entitled "Contrail Project Overview" at the Contrail Business Days, Roma, Italy, January 2014.
- Christine Morin was invited to give a talk on Myriads activities on cloud computing at the EIT ICT Labs meeting on future clouds, Rennes, France, March 2014.
- Christine Morin gave a talk entitled "Contrail: Interoperability and Dependability in a Cloud Federation" at the first workshop of the Joint Laboratory for Extreme Scale Computing, Sophia-Antipolis, France, June 2014.
- Christine Morin was invited to give a talk entitled "Contrail: Toward a Trusted Cloud Market Place" at the EIT ICT Labs Symposium on Future Cloud Computing, Rennes, France, June 2014.
- Christine Morin was invited to give a talk entitled "Contrail: Toward a Trusted Cloud Market Place" at the Inria Scientific Days, Lille, France, June 2014.
- Christine Morin gave an invited talk entitled "Snooze: A Scalable Energy-Efficient IaaS Cloud Management System" at the Next-GWiN 2014 Workshop, Rennes, France, October 2014.
- Christine Morin gave a talk entitled "Checkpointing as a Service in Heterogeneous Clouds" at the second workshop of the Joint Laboratory for Extreme Scale Computing, Chicago, USA, November 2014.
- Guillaume Pierre organized the 2nd ConPaaS workshop (Rennes, May 26th 2014) and gave the opening presentation
- Guillaume Pierre organized the EIT ICT Labs Future Cloud Symposium (Rennes, June 23-24th 2014).
- Anne-Cécile Orgerie gave a talk entitled "Green IT : maîtrise de la consommation énergétiques des équipements informatiques", at Rencontres de la recherche, Fondation Rennes 1, Rennes, September 19, 2014.
- Anne-Cécile Orgerie gave a talk entitled "Toward Energy-Efficient Cloud Computing" at the Inria-Technicolor Workshop, Rennes, December 4, 2014.
- Anne-Cécile Orgerie gave a tutorial entitled "Green Big Data Processing using Hadoop: An Introductory" with Shadi Ibrahim from KerData team, at the ACM/IFIP/USENIX Middleware conference, Bordeaux, December 2014.
- Arnab Sinha presented a demonstration of the VEP-S system at the EIT ICT Labs result day, Helsinki, Finland, December 2014.
- Cédric Tedeschi gave a talk about workflow activities within the DALHIS associate team at the Berkeley Inria Standford workshop, Paris, June 2014.

7.4. Miscellaneous

Roberto-Gioacchino Cascella   is a member of the Inria "Commission locale formation".

Christine Morin   is a member of the Project-Team Committee of INRIA RENNES – BRETAGNE ATLAN-TIQUE (Comité des projets), *Référent Chercheur* for INRIA RENNES – BRETAGNE ATLANTIQUE. She is a member of the Irisa/Inria "Commission Personnel" being in charge of post-docs and "*délégations*". She is correspondant for North America relationships in the Inria Direction of International Relationships. She was the coordinator of Contrail European project. She participated in a researchers-journalists exchange organized by the AJSPI (*Association des Journalistes Scientifiques de la Presse d'Information*). In this context, she hosted Sophy Caulier, free-lance journalist in Myriads team, January 13-17, 2014 and she was hosted March 24-28, 2014 as an intern by Guillaume Mézières, editor in chief of *Le laboratoire des Savoirs* hosted at Radio Prun in Nantes. She contributed to a radio programme (http://labodessavoirs.fr/emissions-du-labo/un-monde-plurilingue/).

Anne-Cécile Orgerie   is in charge (chargée de mission) of the "Green IT" transversal axis of IRISA.

Nikolaos Parlavantzas   is the local coordinator for the international exchange of students at the computer science department of Insa.

Guillaume Pierre   is the local coordinator of the EIT ICT Labs master school in Rennes. He is the local coordinator of the Erasmus exchange program between Université de Rennes 1 and Politehnica University Bucharest.

Jean-Louis Pazat   is the leader of the "Large Scale Systems" department of IRISA. He is the leader of the computer Science Lab at INSA (IRISA-INSA). He is the co-leader of the Operating Systems Activity in the CNRS ASR research Group (*Groupement de Recherche*). He is the coordinator for reviews of international bilateral cooperation projects at the Ministry of Research and Higher Education in the STIC domain.

Thierry Priol   is the director of the Inria European Partnership department.

Cédric Tedeschi   is a member of the administration council of the EECS departement of the University of Rennes 1.

REGAL Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific event organisation

8.1.1.1. General chair, scientific chair

- Pierre Sens was the general co-chair for SBAC-PAD 2014, 26th International Symposium on Computer Architecture and High Performance Computing.
- Marc Shapiro was Program Co-Chair of the OPODIS 2014 conference.

8.1.1.2. Member of the organizing committee

Sébastien Monnet was the workshop chair for SBAC-PAD 2014, 26th International Symposium on Computer Architecture and High Performance Computing. Luciana Arantes was local organizer of SBAC-PAD 2014

8.1.2. Scientific events selection

8.1.2.1. Chair of conference program committee

- Luciana Arantes was PC chair of the XV Workshop on Test and Fault Tolerance, 2014, Brazil.
- Marc Shapiro was Program Co-Chair of the OPODIS 2014 conference.

8.1.2.2. Member of the conference program committee

- Swan Dubois was member of the programm committee of the 16èmes Rencontres Francophones pour les Aspects Algorithmiques des Télécommunications (AlgoTel'14).
- Sébastien Monnet was member of the programm committee of the 1st International Symposium on Cloud Computing (CCA 2014).
- Franck Petit was member of the program committee of the Conférence d'informatique en Parallélisme, Architecture et Système (ComPas) 2014.
- Pierre Sens was member of the program committee of 3rd IEEE/SAE International Conference on Connected Vehicles and Expo (ICCVE 2014), 3rd IEEE Symposium on Network Cloud Computing and Applications (NCCA'2014), 28th IEEE International Parallel and Distributed Processing Symposium (IPDPS'2014).
- Luciana Arantes was member of the program committee The 13th IEEE International Symposium on Network Computing and Applications (NCA 2014).
- Marc Shapiro was member of the PC of the Annual ACM/IFIP/USENIX Middleware Conference (Middleware 2014), and of the Workshop on Adaptive Resource Management and Scheduling for Cloud Computing (AMRS-CC) 2014.

8.1.2.3. Reviewer

Swan Dubois peer-reviewed papers for STACS'14, ICDCS'14, SRDS'14, SSS'14, and WWW'14.

Franck Petit peer-reviewed papers for ICDCN'15, IPDPS'15 and SSS'14.

Marc Shapiro was a reviewer for the European Research Council Consolidator Grant (panel PE6) 2014.

8.1.3. Journal

8.1.3.1. Member of the editorial board

Franck Petit is a member of the editorial board of Journal of Discrete Mathematics and The Scientific World Journal. Pierre Sens is associated editor of International Journal of High Performance Computing and Networking (IJHPCN).

8.1.3.2. Reviewer

Swan Dubois peer-reviewed papers for Information Processing Letters (IPL) and Scientific World Journal (SWJ). Sébastien Monnet peer-reviewed papers for TCS, JPDC and Transaction on Computers journal. Franck Petit peer-reviewed papers for TCS, Distributed Computing, International Journal of Foundations of Computer Science. Luciana Arantes reviewed papers for JPDC and FGCS.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Master: Luciana Arantes, Swan Dubois, Oliver Marin, Sébastien Monnet, Franck Petit, Pierre Sens, Advanced distributed algorithms, M2, UPMC Sorbonne Universités, France

Master: Luciana Arantes, Sébastien Monnet, Pierre Sens, Julien Sopena, Operating systems kernel, M1, UPMC Sorbonne Universités, France

Master: Luciana Arantes, Olivier Marin, System distributed Programming, M1, UPMC Sorbonne Universités, France

Master: Luciana Arantes, Olivier Marin, Franck Petit, Distributed Algorithms, M1, UPMC Sorbonne Universités, France

Licence: Pierre Sens, Luciana Arantes, Julien Sopena, Principles of operating systems, L3, UPMC Sorbonne Universités, France

Licence: Swan Dubois, Sébastien Monnet, Introduction to operating systems, L2, UPMC Sorbonne Universités, France

Licence : Swan Dubois, Data structures in C, 80h, L2, UPMC Sorbonne Universités, France *

Licence : Swan Dubois, Data structures in C, L2, UPMC Sorbonne Universités, France

Ingénieur 4ème année : Marc Shapiro, Introduction aux systèmes d'exploitation, 22 h, M1, Polytech UPMC Sorbonne Universités, France.

8.2.2. Supervision

Completed PhD: Pierpaolo Cincilla: "Gargamel: boosting DBMS performance by parallelising write transactions," UPMC, 09/15/2014. Advisors: Marc Shapiro, Sébastien Monnet.

PhD: Jonathan Lejeune, "Algorithmique distribuée d'exclusion mutuelle : vers une gestion efficace des ressources," UPMC, 09/19/2014, Julien Sopena, Luciana Arantes, Pierre Sens.

Completed PhD: Masoud Saeida Ardekani, "Ensuring Consistency in Partially Replicated Data Stores," UPMC, 09/16/2014. Advisors: Marc Shapiro, Pierre Sutra.

PhD: Yoann Péron, "Development of an adaptive recommendation system", UPMC/Makazi, Franck Petit, Patrick Gallinari, Matthias Oehler (Makazi).

PhD: Mohamed Hamza Kaaouachi, "Autonomic Distributed Environments for Mobility", UPMC/Chart-LUTIN (Labex SMART), Franck Petit, Swan Dubois, and François Jouen (Chart).

PhD in progress: Tao Thanh Vinh, UPMC, CIFRE, since Feb. 2014. Advisors: Marc Shapiro, Vianney Rancurel (Scality).

PhD in progress: Alejandro Z. Tomsic, UPMC, funded by SyncFree, since Feb. 2014. Advisor: Marc Shapiro.

PhD in progress: Mahsa Najafzadeh, UPMC, funded by Inria competitive grant (Cordi-S), since Nov. 2012. Advisor: Marc Shapiro.

PhD in progress: Lokesh Gidra, UPMC, since Feb. 2011. Advisors: Gaël Thomas, Julien Sopena, Marc Shapiro.

PhD in progress: Marek Zawirski, UPMC, funded by Inria Google Research Grant. Since Oct. 2010. Advisor: Marc Shapiro.

8.2.3. Juries

Pierre Sens was the reviewer of:

- Jacques Jorda. HDR IRIT, Toulouse
- A. Sinah. PhD Irisa (Advisor : M. Banatre)
- D. Dib. PhD Irisa (Advisor : C. Morin)
- O. Shahmirzadi. PhD EPFL, Suisse (Advisor : A. Schiper)
- M. Servajean. PhD LIRMM (Advisor : E. Pacitti)
- T-T. Vu. PhD LIFL (Advisor : N. Meleb)

Franck Petit was the reviewer of:

- Greicy Marques-Costa, TIMA/ARIS, Grenoble (Advisor: R. Velazco),
- Ahmed Mouhamadou Wade, LaBRI Bordeaux (Advisor: R. Klasing)

Marc Shapiro was a member of the thesis committee of:

- Ghassan Almaless, UPMC Sorbonne Universités (advisor: Franck Weisburt).
- Jiaqing Du, École Polytechnique Fédérale de Lausanne (advisor: Willy Zwaenepeol).

8.3. Popularization

The team animated a stand on distributed algorithms at the 2014 edition of "Fête de la Science"

SCALE Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. general chair, scientific chair

- Eric Madelaine, scientific co-chair of the 11th International Conference on Formal Aspects of Component Software (FACS'14), Bertinoro, Italy, Sep. 2014. http://facs2014.cs.unibo.it/.

9.1.1.2. member of the organizing committee

- Fabien Hermenier was a co-chair of the poster session for Compas.

9.1.2. Scientific events selection

9.1.2.1. responsable of the conference program committee

- Olivier Dalle, member of the SIMUTools Steering Committee;
- Eric Madelaine, member of the FACS Steering Comittee;

9.1.2.2. member of the conference program committee

- Françoise Baude: program committee member of CCGrid'14, ISPA'14, HPCS 2014, Compas2014
- Olivier Dalle: program committee member of DEVS/TMS'14, ACM SIGSIM PADS'14
- Ludovic Henrio: program committee member of ICE'14
- Eric Madelaine: program committee member of EDˆC'14

9.1.2.3. reviewer

- Françoise Baude: reviewer for EuroPar 2014
- Fabien Hermenier: reviewer for the international conference PDP - Special session on energy-aware computing, and the national conference Compas. He was also a sub-reviewer for ICDCS.

9.1.3. Journal

9.1.3.1. member of the editorial board

- Françoise Baude: Concurrency and Computation: Practice and Experience, special issue *2013 Special Issue on High Performance Computing and Simulation*.

9.1.3.2. reviewer

- Françoise Baude was a reviewer for journals Parallel and Distributed Computing, Journal of Computational Finance, and International Journal of Computer Mathematics;
- Olivier Dalle was a reviewer for journals ACM TOMACS, SCS SIMULATION, Elsevier SIMPRA;
- Fabien Hermenier was a reviewer for journals Concurrency and Computation: Practice and Experiment, IEEE Transaction on Cloud Computing, IEEE Transaction on Parallel and Distributed Systems, Journal of Grid Computing;
- Ludovic Henrio was reviewer for the journal SCP (Science of Computer Programming), Mathematical Structures in Computer Science, and STVR;
- Eric Madelaine was reviewer for the journal SCP (Science of Computer Programming), special issue *2013 on Formal Aspects of Component Software*.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence : Françoise Baude, Algorithmique et Programmation en Java, 70 H eqTD, niveau L2, Polytech'Nice Sophia, UNS, France

Licence : Françoise Baude, Introduction au Web (new course setup), 30 H eqTD, niveau L2, Polytech'Nice Sophia, UNS, France

Licence : Olivier Dalle, Systèmes Informatiques, 36 H eqTD, niveau L1, UFR Sciences, UNS, France

Licence : Olivier Dalle, Projet Scientifique Informatique, 33 H eqTD, niveau L2, UFR Sciences, UNS, France

Licence : Olivier Dalle, Systèmes d'Exploitation, 54 H eqTD, niveau L2, UFR Sciences, UNS, France

Licence : Olivier Dalle, Initiation Framework Programmation Serveur, 63 H eqTD, niveau L3, UFR Sciences, UNS, France

Licence : Fabien Hermenier, Algorithmique et Programmation en Java, 70 H eqTD, niveau L2, Polytech'Nice Sophia, UNS, France

Licence : Fabien Hermenier, Introduction à Internet, 103 H eqTD, niveau L2, Polytech'Nice Sophia, UNS, France

Licence : Fabien Hermenier, Outils pour le Génie Logiciel 14 H eqTD, niveauau L3/SI3, Polytech'Nice Sophia, UNS, France

Licence : Justine Rochas, TP de Programmation Orientée Objet 18 H eqTD, niveau L3, UFR Sciences, UNS, France

Master : Françoise Baude, Applications Réparties, 45 H eqTD, niveau M1/SI4, Polytech'Nice Sophia, UNS, France

Master : Françoise Baude and Ludovic Henrio, Distributed systems: an Algorithmic approach, 17 H + 17 h eqTD, niveau M2, Polytech'Nice Sophia/UFR Sciences, UNS, France

Master : Olivier Dalle, Systèmes Distribués, 9 H eqTD, niveau M1, UFR Sciences, UNS, France

Master : Fabrice Huet, Programmation Parallèle et Distribuée, 63h eqTD, niveau M1, UFR SCiences, UNS, France

Master : Fabrice Huet, Programmation Avancée, 78h eqTD, niveau M1, UFR Sciences, UNS, France

Master : Justine Rochas, TP de Systèmes Distribués 24 H eqTD, niveau M1, UFR Sciences, UNS, France

Master : Justine Rochas, TP de Technologies XML 24 H eqTD, niveau M1, UFR Sciences, UNS, France

Summer School : Eric Madelaine, "Designing, programming, and verifying distributed systems", 9 H eqTD, East China Normal University Shanghai, China.
Françoise Baude was Innovation and Entrepreneurship coordinator for the ICT Labs Summer school on Urban Life and Mobility, organized from june 29th to july 11th 2014 at Eurecom (supervision, evaluation and ranking of student teams from an educational perspective).

9.2.2. Supervision

PhD : Laurent Pellegrino, "Pushing dynamic and ubiquitous event-based interaction in the Internet of services: a middleware for event clouds", UNS, 3/4/2014, Françoise Baude, Fabrice Huet.

PhD: Yanwen Chen, "Formal model and Scheduling for cyberphysical systems", cotutelle between UNS and ECNU Shanghai, 30/11/2014, advisors Eric Madelaine and Yixiang Chen

PhD: Nuno Gaspar, "Integrated, Autonomic, and Reliable Deployment and Management for SaaS composite applications", UNS, 16/12/2014, advisor: Eric Madelaine

PhD in progress: Michaël Benguigui, "Modèles de programmation pour l'analyse de données sur machines multi-cœurs, grilles et clouds", since Dec 2011, advisor Françoise Baude.

PhD in progress: Maeva Antoine, "Plateforme élastique pour le stockage et la notification d'Evènements", since Oct. 2012, advisors Eric Madelaine and Fabrice Huet

PhD in progress: Sophie Song, "Publish-Subscribe Models for Large Scale Data Analysis Frameworks", since Feb. 2013, advisor Fabrice Huet and Frédéric Margoulés (ECP)

PhD in progress: Damian Vicino, "Simulation-based Open Science in the Cloud", since Jan. 2013, advisors Françoise Baude, Gabriel Wainer (Carleton University, Canada), and Olivier Dalle.

PhD in progress : Vincent Kerbache, "Resource Management in a Cloud Supplied with Renewable Energies", since Sep. 2013, advisors Eric Madelaine and Fabien Hermenier

PhD in progress : Oleksandra Kulankhina, "Model-driven environment for the development of safe component-based distributed applications", since Oct. 2013, advisor Eric Madelaine

PhD in progress: Justine Rochas, "Programming model and middleware support for distributed and concurrent applications", since Oct. 2013, advisor Ludovic Henrio

PhD in progress: Hlib Mykhailenko,"Probabilistic Approaches for Big Data Analytics", since March. 2014, advisors Fabrice Huet, Philippe Nain (Inria)

PhD in progress: Vincenzo Mastandrea, "Deadlock analysis for concurrent and distributed programming", since Oct. 2014, advisors Ludovic Henrio and Cosimo Laneve.

9.2.3. *Juries*

- Françoise Baude was jury president for the PhD of Gauthier Berthou (Université de Grenoble), jury member for the PhD of Pierre-Louis Aublin (Université de Grenoble), reviewer and jury member for the PhD of Fawaz Paraiso (Université de Lille 1), of Mohamed Mohamed (INT Telecom Paris-Sud, Université d'Evry), of Soguy Mak-Karé Gueye (Université de Grenoble).

- Ludovic Henrio was jury member for the PhD of Karl Palmskog (KTH); he was reviewer and jury member for the PhD of Thomas Pinsard (Université d'Orléans).

- Fabien Hermenier co-reviewed (with F. Baude) the PhD thesis of Christine Mayap Kamga (University of Toulouse) and an expert for a CIFRE thesis grant.

- Fabrice Huet reviewed the PhD thesis of Roelof Kemp (Vrije Universiteit, Amsterdam).

- Eric Madelaine was reviewer for the PhD of M. Donc Ruzhen, University of Pisa

9.3. Popularization

- Françoise Baude is in charge since September 2011 of the set up and animation of an educational program *Cordées de la Réussite*. She leads as Polytech'Nice Sophia member, and in connection with MASTIC activities at Sophia-Antipolis, two *Cordées pour la Science à Sophia* groups (one with Lycée Vinci Antibes, the other with Lycée Tocqueville Grasse). Since 2013, she is in charge of the AVOSTII-STI2D program implementation for Polytech'Nice Sophia, requiring adverstising high-school pupils for engineering studies, in particular in ICT.
  As ICT Labs Master School University of Nice Sophia-Antipolis coordinator, she is in charge of publicizing, orchestrating, and reporting about all the ICT Labs master programmes involvement of UNS (Internet and Technology Architecture, and Data Science programmes); and as part of the *Paris Node comité de pilotage*, to follow French activities within ICT Labs, and report about UNS activities within this KIC. Overall this mission required about two full-time months of work in 2014.

- Fabrice Huet is in charge, since 2011, of the *Informatiques et Sciences du Numérique* courses for the academia of Nice. These courses are offered to high school teachers who volunteer to offer a Computer Science option to their students. He has also given seminars in high school during the *Fête de la Science*.

<p style="text-align:center">**SPIRALS Team**</p>

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. General chair, Scientific chair

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

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

9.1.1.2. Member of the organizing committee

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

9.1.2. Scientific events selection

9.1.2.1. Responsable of the conference program committee

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

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

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

9.1.2.2. Member of the conference program committee

Laurence Duchien

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

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

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

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

International Conference on Software Maintenance and Evolution

European Conference on Software Architecture (ECSA)

International Software Product Line Conference (SPLC)

Philippe Merle

Middleware Workshop on Cloud Brokers

International Workshop on Cloud Security and Cryptography (CloudCrypto)

IEEE INFOCOM Workshop on Cross-Cloud Systems (CrossCloud)

International Workshop on Adaptive and Reflective Middleware (ARM)

Conférence en IngénieriE du Logiciel (CIEL)

Filip Krikava

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

Martin Monperrus

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

International Symposium on Search Based Software Engineering (SSBSE)

Asia-Pacific Software Engineering Conference (APSEC)

Romain Rouvoy

ACM/IFIP/USENIX Middleware Conference (Middleware)

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

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

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

International Workshop on Middleware for CyberPhysical Systems (MW4CPS)

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

International Workshop on Adaptive and Reflective Middleware (ARM)

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

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

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

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

French Conference on Systems, Architecture and Parallelism (ComPAS)

Lionel Seinturier

Working IEEE/IFIP Conference on Software Architecture (WICSA)

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

IEEE International Symposium on Software Crowdsourcing (ISCC)

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

International Workshop on Middleware for CyberPhysical Systems (MW4CPS)

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

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

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

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

Australasian Software Engineering Conference (ASWEC)

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

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

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

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

9.1.2.3. Reviewer

Philippe Merle

European Conference on Software Architecture (ECSA)

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

Jifeng Xuan

IEEE International Conference on Software Engineering (ICSE)

Asia-Pacific Software Engineering Conference (APSEC)

International Conference on Quality Software (QSIC)

IEEE International Conference on Software Maintenance and Evolution (ICSME)

9.1.3. Journal

9.1.3.1. Member of the editorial board

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

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

9.1.3.2. Reviewer

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

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

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

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

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

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

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

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

Software Project Management, 50h, Level M2, Master MIAGE,

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

Software Product Lines, 8h, Level M2, Master of Computer Science,

Research and Innovation Initiation, 22h, Level M2 IAGL, Master of Computer Science,

Tutoring Internship, 16h, Level M2, Master of Computer Science.

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

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

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

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

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

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

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

> Conception d'Applications Réparties, 18h, Level M1, Master of Computer Science,
>
> Infrastructures et Frameworks Internet, 6h, Level M2 E-Services and TIIR, Master of Computer Science.
>
> **E-learning**
>
> > : Lionel Seinturier, Infrastructure et frameworks Internet, 10 semaines, plate-forme Corolia formation, Telecom Lille & Université Lille 1, niveau Bac+5, formation continue, 12 inscrits par session

9.2.2. Supervision

> Defended HdR: Romain Rouvoy, Contributions to the Autonomy of Ubiquitous Software Systems, University Lille 1, 5 December 2014
>
> Defended PhD: Alexandre Feugas, Une approche agile, fiable et minimale pour le maintien de la qualité de service lors de l'évolution d'applications à base de processus métiers, 8 October 2014, Laurence Duchien & Sébastien Mosser (University Nice Sophia-Antipolis).
>
> Defended PhD: Nicolas Haderer, APISENSE®: a distributed platform for deploying, executing and managing data collection campaigns using smart devices, 5 November 2014, Lionel Seinturier & Romain Rouvoy.
>
> Defended PhD: Matias Martinez, Extraction and Analysis of Knowledge for Automatic Software Repair, 10 October 2014, Laurence Duchien & Martin Monperrus.
>
> Defended PhD: Adel Noureddine, Towards a Better Understanding of the Energy Consumption of Software Systems, 19 March 2014, Lionel Seinturier & Romain Rouvoy.
>
> Defended PhD: Fawaz Paraiso, soCloud : une plateforme multi-nuages distribuée pour la conception, le déploiement et l'exécution d'applications distribuées à large échelle, 18 June 2014, Lionel Seinturier & Philippe Merle.

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

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

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

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

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

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

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

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

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

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

9.2.3. Juries

Laurence Duchien

Boris Baldassari (University Lille 3), chair

Calvante Hora André (University Lille 1), chair

Koutheir Attouchi (University Paris 6), reviewer

Cédric Teyton (University of Bordeaux), reviewer

Jean-Christophe Bach (University of Lorraine), reviewer

Jonathan Michaux (Telecom ParisTech), reviewer

Hamza Samih (University Rennes 1), reviewer

Alexandre Feugas (University Lille 1), director

Matias Martinez (University Lille 1), director

Clément Quinton (University Lille 1), director

Philippe Merle

Fawaz Paraiso (University Lille 1), co-supervisor

Martin Monperrus

Boris Baldassari (University Lille 3), examiner

Alexandre Bartel (University of Luxembourg), co-supervisor

Matias Martinez (University Lille 1), co-supervisor

Romain Rouvoy

Keling Da (University of Pau et des Pays de l'Ardour), examiner

Adel Noureddine (University Lille 1), co-supervisor

Nicolas Haderer (University Lille 1), co-supervisor

Yunbo Li (University of Nantes), member of the comité de suivi de thèse

Lionel Seinturier

>   HDR Xavier Bonnaire (University Paris 6), chair
>
>   HDR Yvan Peter (University Lille 1), chair
>
>   HDR Walid Gaaloul (University Paris 6), reviewer
>
>   HDR Nicolas Anquetil (University Lille 1), examiner
>
>   HDR Romain Rouvoy (University Lille 1), examiner
>
>   Nadia Elouali (University Lille 1), chair
>
>   Mohamed Amroune (University of Toulouse), reviewer
>
>   Etienne Gandrille (University of Grenoble), reviewer
>
>   Soguy Gueye (University of Grenoble), reviewer
>
>   Loïc Letondeur (University of Grenoble), reviewer
>
>   Julien Richard-Foy (University Rennes 1), reviewer
>
>   Nicolas Haderer (University Lille 1), director
>
>   Adel Noureddine (University Lille 1), director
>
>   Fawaz Paraiso (University Lille 1), director
>
>   Nour Assy (Telecom SudParis), member of the comité de suivi de thèse
>
>   Anca Iordache (University Rennes 1), member of the comité de suivi de thèse

9.3. Popularization

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

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

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

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

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

<div align="center">

WHISPER Team

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9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. Member of the organizing committee

Julia Lawall was a member of the SIGPLAN Executive Committee, which supervises the organization of the various conferences sponsored by SIGPLAN, as well as other SIGPLAN activities.

Gilles Muller is a member of the steering committee of the EuroSys conference.

9.1.2. Scientific events selection

9.1.2.1. Member of the conference program committee

Gilles Muller was a PC member for the conferences VEE, TRIOS, for the workshop APSYS and for the jury of the best EuroSys PhD (Roger Needham award).

Julia Lawall was a PC member for the conferences Modularity and ICDCS.

Pierre-Évariste Dagand was a PC member for WGP 2014, the workshop on generic programming.

9.1.3. Journal

9.1.3.1. Member of the editorial board

Julia Lawall: Higher-Order and Symbolic Computation, Science of Computer Programming.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

9.2.2. Supervision

PhD : Koutheir Attouchi, Managing Resource Sharing Conflicts in an Open Embedded Software Environment, Université Pierre et Marie Curie, 11 juillet 2014, Gilles Muller et Gaël Thomas, CIFRE Orange

PhD : Jean-Pierre Lozi, Towards more scalable mutual exclusion for multicore architectures, Université Pierre et Marie Curie, 16 juillet 2014, Gilles Muller et Gaël Thomas

PhD : Lisong Guo, Boost the Reliability of the Linux Kernel: Debugging Kernel Oopses, Université Pierre et Marie Curie, 18 décembre 2014, Julia Lawall et Gilles Muller

PhD in progress : Florian David, A profiler for locks in Java servers, octobre 2011, Gilles Muller et Gaël Thomas

PhD in progress : Peter Senna Tschudin, Développement Rapide de Pilotes de Périphériques, mai 2014, Julia Lawall et Gilles Muller

PhD in progress : Valentin Rothberg, Exploration de la génétique des pilotes périphériques, octobre 2014, Julia Lawall et Gilles Muller

PhD in progress : Antoine Blin, Execution of real-time applications on a small multicore embedded system, avril 2012, Gilles Muller et Julien Sopena (Regal), CIFRE Renault

9.2.3. Juries

- Gilles Muller:

- – HDR: David Bromberg (University of Bordeaux, reviewer), Michaël Hauspie (reviewer).
- – PhD: Jigar Solanki (University of Bordeaux, rapporteur), Pierre-Louis Aublin (University of Grenoble, reviewer), Baptiste Lepers (University of Grenoble), Etienne Millon (University of Pierre et Marie Curie, President)

- Julia Lawall:
  - – HDR: David Bromberg (University of Bordeaux, reviewer), Nicolas Anquetil (University of Lille).
  - – PhD: Alexandre Lissy (University of Tours, reviewer), Lucia (Singapore Management University)

9.3. Popularization

Julia Lawall presented a tutorial on Coccinelle at ENS (Masters students), the IT University of Copenhagen (PhD students), at the Suse Labs conference (developers), at LinuxCon Europe (developers), and at Middleware (PhD students and researchers).

ALGORILLE Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. Organizing committee membership

Lucas Nussbaum was a member of the organizing committee for Reppar (1st International Workshop on Reproducibility in Parallel Computing, held together with Euro-Par 2014).

Martin Quinson was a member of the organizing committee for the Fourth SimGrid Users' Days (Le Bono, Brittany, France), and of the PUF/JLPC Summer school on Performance Metrics, Modeling and Simulation of Large HPC Systems (Sophia Antipolis, France).

8.1.2. Scientific events selection

8.1.2.1. Conference program committee membership

Lucas Nussbaum was a member of the PC for Reppar (1st International Workshop on Reproducibility in Parallel Computing, held together with Euro-Par 2014), CloudCom'2014 (HPC on Cloud track), WETICE'2014 (Convergence of Distributed Grid, Cloud and their Management track), Grid'5000 Spring School 2014, and ComPAS'2014.

Martin Quinson was a member of the PC for IPDPS'14 (ACM/IEEE International Parallel and Distributed Processing Symposium), SimulTech'14 (In cooperation with ACM SIGSIM) and PADS'14 (ACM SIGSIM Workshop on Principles of Advanced Discrete Simulation).

8.1.3. Journal

8.1.3.1. Editorial board membership

Since October 2001, J. Gustedt is Editor-in-Chief of the journal *Discrete Mathematics and Theoretical Computer Science* (DMTCS).

In 2014, the episcience platform for open access journals has been created in a joint effort by Inria and CNRS. DMTCS will be one of the first journals passing to this platform and we have been a driving force in the definition and debugging of the new platform, see [16].

Since 2013, M. Quinson is a member of the editorial board of the Interstices journal (edited by Inria in collaboration), aiming at increasing the scientific outreach of informatic.

8.1.3.2. Reviewing Activities

Jens Gustedt has served as a reviewer for *Social Network Analysis and Mining* and *IEEE Transactions on Parallel and Distributed Systems*.

Lucas Nussbaum was a reviewer for *Security and Communication Networks*, and *IEEE Transactions on Emerging Topics in Computing*.

Sylvain Contassot-Vivier is a regular reviewer for the *Engineering Applications of Artificial Intelligence* journal.

8.1.4. Standardization

Since Nov. 2014, Jens Gustedt is a member of the ISO working group SC22-WG14 for the standardization of the C programming language.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

IUT Nancy-Charlemagne, Université de Lorraine: Lucas Nussbaum, Installation of Linux, 20 ETD, Licence pro ASRALL (L3), Université de Lorraine, France.

IUT Nancy-Charlemagne, Université de Lorraine: Lucas Nussbaum, Outils Libres, 16 ETD, Licence pro ASRALL (L3), Université de Lorraine, France.

IUT Nancy-Charlemagne, Université de Lorraine: Lucas Nussbaum, Administration des infrastructures avancées, 12 ETD, Licence pro ASRALL (L3), Université de Lorraine, France.

École CNRS "Informatique pour le calcul scientifique": Lucas Nusbaum, Gestion de versions avec Git, 3h.

TELECOM Nancy, Université de Lorraine: Lucas Nussbaum, Introduction au Logiciel Libre et au projet Debian, 2h.

TELECOM Physique Strasbourg: Jens Gustedt, parallélisme, 10h ETD.

ENSIIE Strasbourg: Jens Gustedt, programmation avancée, 20h ETD.

Département Informatique, Université de Strasbourg: Jens Gustedt, systèmes concurrents, 20h ETD.

TELECOM Nancy, Université de Lorraine: Martin Quinson, "Algorithmique et Programmation,", 48 ETD, 1ere année (L3), Université de Lorraine, France.

TELECOM Nancy, Université de Lorraine: Martin Quinson, "Langage C et programmation shell,", 48 ETD, 1ere année (L3), Université de Lorraine, France.

TELECOM Nancy, Université de Lorraine: Martin Quinson, "Programmation Système,", 24 ETD, 2ème année (M1), Université de Lorraine, France.

Faculté des Sciences et Technologies, Université de Lorraine: Sylvain Contassot-Vivier, "Architectures logicielles avancées", 19 ETD, M2, Université de Lorraine, France.

Faculté des Sciences et Technologies, Université de Lorraine: Sylvain Contassot-Vivier, "Informatique graphique", 63.5 ETD, L1, Université de Lorraine, France.

Faculté des Sciences et Technologies, Université de Lorraine: Sylvain Contassot-Vivier, "Sécurité", 10 ETD, L3, Université de Lorraine, France.

TELECOM Nancy, Université de Lorraine: Sylvain Contassot-Vivier, "Algorithmique Parallèle", 35 ETD, 2ème année (M1), Université de Lorraine, France.

Faculté des Sciences et Technologies, Université de Lorraine: Sylvain Contassot-Vivier, "Algorithmique et Programmation", 16 ETD, L1, Université de Lorraine, France.

Faculté des Sciences et Technologies, Université de Lorraine: Sylvain Contassot-Vivier, "Algorithmique et Programmation", 12 ETD, L2, Université de Lorraine, France.

Faculté des Sciences et Technologies, Université de Lorraine: Sylvain Contassot-Vivier, "Algorithmique et Programmation", 32.5 ETD, L3, Université de Lorraine, France.

8.2.2. Supervision

PhD in progress: Tomasz Buchert, *Orchestration of experiments on distributed systems*, since Oct 2011, Jens Gustedt & Lucas Nussbaum.

PhD in progress: Marion Guthmuller, *Dynamic verification of distributed applications, using a model-checking approach*, since Oct 2011, Sylvain Contassot-Vivier & Martin Quinson.

PhD in progress: Mariem Saied, *Ordered Read-Write Locks for Multicores and Accelerators*, since Nov 2013, Jens Gustedt & Gilles Muller.

Internship: Raphaël Rieu-Helft, *Étude de la multiplication binaire et approches dynamiques pour la factorisation de nombres*, June and July 2014, Sylvain Contassot-Vivier & Nazim Fatès (MAIA team).

8.2.3. Juries

Lucas Nussbaum was a member of the recruitment committee for an associate professor (MCF) in computer science at ENS Lyon.

Sylvain Contassot-Vivier was member and president of the PhD committee of Carlos Carvajal. He is also the Loria referent of several PhD students (referents have to follow and check the regular progress of the PhD).

8.3. Popularization

Jens Gustedt is regularly blogging about efficient programming, in particular about the C programming language. He also is an active member of the stackoverflow community a technical Q&A site for programming and related subjects. A book about modern C is in preparation.

In collaboration with G. Oster, Coast team of Inria Nancy Grand-Est, M. Quinson develops a pedagogic platform. This tool aims at providing an environment that is both appealing for the student, easy to use for the teacher, and efficient for the learning process. Since 2014, an Inria ADT project aims at changing this practical tool into an experimental platform to study the didactic of programming.

M. Quinson is co-leading a working group on the teaching of computer science in the LORIA laboratory. He served both as a program chair and a local chair for a nation-wide two-days workshop gathering about hundred people involved in the introduction of computer science in the French secondary education: university lecturers in charge of teaching to the prospective CS teachers, regional heads of the Education minister accompanying this reform and producer of teaching resources. He also served both as a program chair and local chair for a regional gathering of CS teachers of the secondary wanting to exchange their good practices. This initiative, initiated in Nancy, will spread in several other French cities in 2015.

Either as a speaker or as a co-organizer, M. Quinson participated in several events that aim the popularization of computer science. These targeted a large variety of public, kids and pupils (Telecom Nancy in November), university students (Inria in March), mathematics teachers (APMEP Lorraine in March), CS teachers (SIF-ISN day in June), or the general public (Fête de la science in November).

S. Contassot-Vivier has participated to Loria animation days towards high-school visitors. In this context he has used the material and games co-designed by M. Quinson and others in the context of unplugged computer science teaching.

<p align="center" style="color:red">ALPINES Project-Team</p>

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. General chair, scientific chair

- Laura Grigori: Co-Chair, Parallel Matrix Algorithms and Applications Workshop, Lugano, Switzerland, June 2014.
- Laura Grigori: Program Director of the SIAM SIAG on Supercomputing (SIAM special interest group on
- Frédéric Hecht: Organizing the 6th FreeFem++ days (December 2014, paris)
- Frédéric Hecht: responsable de la session Maillage, Horizon Maths 2014, FSMP and IFPen, Reuil-Malmaison. supercomputing), January 2014 - December 2015.

8.1.1.2. Member of the organizing committee

- Laura Grigori: Member of organizing committee, SIAM Conference on Parallel Processing and Scientific Computing, February 2014, Portland, USA.
- Laura Grigori: Member of Organizing Committee, Combinatorial Scientific Computing Workshop, Lyon 2014.

8.1.2. Scientific events selection

8.1.2.1. Responsable of the conference program committee

- Laura Grigori: Chair of Parallel Numerical Algorithms Area, EuroPar Conference September 2014.

8.1.2.2. Member of the conference program committee

- Laura Grigori: Member of Program Committee of IEEE International Parallel and Distributed Processing Symposium, IPDPS 2015.
- Laura Grigori: Member of Program Committee of HiPC 2014, 19th IEEE Int'l Conference on High Performance Computing.

8.1.3. Journal

8.1.3.1. Member of the editorial board

- Laura Grigori: Area editor for Parallel Computing Journal, Elsevier, since June 2013.
- Laura Grigori: Member of the editorial board for the SIAM book series Software, Environments and Tools. See http://www.siam.org/books/series/se.php. Since March 2014.
- Frédéric Nataf: Member of the editorial board of Journal of Numerical Mathematics since 2012.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Licence : Xavier Claeys, 2MOI1: Orientation et Insertion Professionnelle, 40 hrs de travaux pratiques, niveau L2, Université Pierre et Marie Curie, France

Master : Xavier Claeys, MM009: Informatique de base, 72 hrs de travaux pratiques en programmation C++, niveau M1, Université Pierre et Marie Curie, France

Master : Xavier Claeys, NM406: Résolution des EDP par la méthode des éléments finis, 18 hrs de travaux pratiques en programmation C++, niveau M2, Université Pierre et Marie Curie, France

Master : Xavier Claeys, MM031: Informatique Scientifique, 44 hrs de de cours magistral, niveau M1, Université Pierre et Marie Curie, France

Master: Laura Grigori, Course on *Calcul haute performance, algorithmes parallèles d'algèbre linéaire à grande echelle, stabilité numérique*, Master 2 Mathematiques & Applications, UPMC, 24 hours.

Master : Frederic Hecht, Tutorials of practical C++ programming for the course *Informatique de Base*, 36 hours, Master 1 Mathématiques et Applications, UPMC, France

Master : Frederic Hecht, Course on Numerical methods for fluid mechanics, 30 hours, Master 2 Mechanics, UPMC, France.

Master : Frederic Hecht, From PDEs to their resolution by finite element methods, 36 hours per year, Master 2 UPMC, France.

Master : Frederic Nataf, Course on Domain Decomposition Methods, 30 hours, Master 2, UPMC, France.

Master : Frederic Nataf, Course on Domain Decomposition Methods, 15 hours, Master 2, ENSTA, France.

8.2.2. *Supervision*

PhD : Pierre Jolivet, defended September 2014, University of Grenoble, advisors F. Nataf, C. Prudhome and F. Hecht

PhD : Sophie Moufawad, Enlarged Krylov Subspace Methods and Preconditioners for Avoiding Communication, defended December 2014, UPMC, advisor L. Grigori

PhD : Nicole Spillane, (funded by Michelin), co-advisor F. Nataf

PhD : Sylvain Auliac, defended 2014, UPMC, advisor F. Hecht

PhD : Pierre-Henri Tournier, defended 2015, UPMC, advisor F. Hecht and M. Comte

PhD in progress : Sebastien Cayrols, since October 2013 (funded by Maison de la simulation), adivsor L. Grigori.

PhD in progress : Ryadh Haferssas, since October 2013 (funded by Ecole Doctorale, UPMC), advisor F. Nataf

PhD in progress : Mireille El-HAddad, since March 2014 (Cotuelle l'Université Saint-Joseph de Beyrouth, Liban et UPMC) , advisors F. Hecht and T. Sayah

8.2.3. *Juries*

- Laura Grigori: Phd thesis, Laurent Berenguer, Rapportrice, Université Claude Bernard, Lyon 1, Mathématiques Appliquées, defended October 2014.
- Laura Grigori: HDR habilitation of Clement Pernet, Rapportrice, Université de Grenoble, Informatique, defended November 2014.
- F. Nataf: HDR habilitation of Michel Belliard, Rapporteur, Université de Marseille, Applied Mathematics, defended in November 2014.
- F. Nataf: HDR habilitation of Marion Darbas, Université de Picardie, defended in December 2014.
- F. Nataf: Phd thesis, Abdoulaye Samake, Université de Grenoble, Applied Mathematics, defended in December 2014.
- F. Hecht: HDR habilitation of Mme. Naïma Debit, Rapporteur, Université Claude Bernard Lyon I, defended in December 2014.
- F. Hecht: Phd thesis, M. Ange Toulougoussou Université Pierre et Marie Curie , defended in December 2014.
- F. Hecht: Phd thesis, M. Jimmy Mullaert, Université Pierre et Marie Curie, defended in December 2014.
- F. Hecht: Phd thesis, M. Stéphane Veys Université Joseph Fourier, Grenoble , defended in November 2014.
- F. Hecht: Phd thesis, M. Jeremy Veysset, CEMEF - Mines ParisTech, Sophia Antipolis Grenoble , defended in November 2014.
- F. Hecht: Phd thesis, M. Jad Dakroub, Université Pierre et Marie Curie et Université Saint Joseph de Beyrouth defended in October 2014.

AVALON Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. general chair, scientific chair

Laurent Lefevre and Frédéric Desprez were general chairs of the Grid 5000 Spring School 2014, Lyon, June 17-19, 2014.

F. Desprez: BigDataCloud (workshop within EuroPAR)

L. Lefevre :

- Co-Workshop organizer of TASUS 2014: Techniques and Applications for Sustainable Ultrascale Computing Systems, held during EUROPAR 2014, Porto, Portugal, August 25-26, 2014
- Co-organizer of the Green Days @ Rennes event: "Avalanche of data, virtual machines and connected objects : energy efficiency is mandatory - Impact on architectures, systems and networks", Rennes, July 1-2, 2014
- Co-Workshop chair of ExtremeGreen 2014 : Extreme Green & Energy Efficiency in Large Scale Distributed Systems , Chicago, IL, USA, May 2014

9.1.1.2. member of the organizing committee

G. Fedak: Publicity Chair for SBAC-PAD'14

Eddy Caron and Laurent Lefevre: co-organizer for the Inria booth at SC'14.

9.1.2. Scientific events selection

9.1.2.1. member of the conference program committee

E. Caron: HCW 2014, IPDPS 2014, CCA-2014

F. Desprez: Closer, IPDPS, CCGRID, VECPAR, Supercomputing, ComPAS, HotCloud, BigData, Cluster.

G. Fedak: AINA, EuroPar, CloudCom, HPDC

JP. Gelas: ExtremeGreen.

O. Glück: ExtremeGreen, PDP.

L. Lefevre : IEEE CCGrid15, AusPDC15, CLOUDNET14, EuroMPI/ASIA 2014, IEEE HPCC14, Greencom14, ICA3PP14, ENA-HPC14, Globecom14 SAC Green Communication Systems and Networks. ICCCN14 (DCBC), ICT4S14

C. Perez: Cloud Control Workshop, CCGRID'15, Cluster, EuroPar, VECPAR.

F. Suter: EuroPar, EuroMPI/Asia, VECPAR, VDTC.

9.1.2.2. reviewer

E. Caron: Hotcloud'14

JP. Gelas: ExtremeGreen.

O. Glück: EuroPar, Cluster.

F. Suter: CCGrid, Cluster.

9.1.3. Journal

9.1.3.1. member of the editorial board

- F. Desprez: Scalable Computing: Practice and Experience
- G. Fedak: Journal of Cluster Computing
- L. Lefevre : Associate editor of IEEE Transactions on Cloud Computing (TCC)

9.1.3.2. reviewer

E. Caron: JPDC, TPDS, Cluster Computing, Engineering Applications of Artificial Intelligence

F. Desprez: Parallel Computing

G. Fedak: Computer

C. Perez: Parallel Computing.

F. Suter: Parallel Computing, CCPE, JPDC, FGCS, GPAA.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

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

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

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

Master: Olivier Glück, Services et Protocoles Applicatifs sur Internet, 24h, niveau M2, IGA Casablanca, Maroc

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

Master: Jean-Patrick Gelas, Analyse de performance, 6h, niveau M2, Université Lyon 1, France

Master: Jean-Patrick Gelas, Réseaux, 48h, niveau M2 (CCI), Université Lyon 1, France

Master: Jean-Patrick Gelas, Système d'exploitation, 30h, niveau M2 (CCI), Université Lyon 1, France

Master: Jean-Patrick Gelas, Architecture des routeurs, 6h, niveau M2, Université Lyon 1, France

Master: Jean-Patrick Gelas, Systèmes embarqués (Linux, Android), 85h, niveau M2, Université Lyon 1, France

Master: Jean-Patrick Gelas, Routage et IPv6, 45h, niveau M2, Université Lyon 1, France

Master: Jean-Patrick Gelas, Routage et IPv6, 45h, niveau M2, Université Lyon 1, France

Master: Frédéric Desprez, Parallélisme, 30h, niveau M1, Université Lyon 1, France

Master: Eddy Caron, Gilles Fedak, Laurent Lefèvre, and Christian Perez, Grid and Cloud Computing, 36h, niveau M2, Ecole Normale Supérieure de Lyon, France

PhD.: G. Fedak, MapReduce Programming Model, Formation doctorale, 7h, Université Paris XIII, Villetaneuse, France

Master: G. Fedak, MapReduce and Big Data, Master, 9h, University of Babes-Bolay, Romania

9.2.2. Supervision

HdR : Frédéric Suter, Bridgin a gap between research and production, contributions to scheduling and simulation, École Normale Supérieure de Lyon, December 10, 2014.

PhD in progress: Semen Marchuk, *Contribution pour la conception d'algorithmes d'ordonnancement de taches de calcul dans le domaine de l'animation 3D*, 10/2014, Eddy Caron (dir), Pierre Biecher (CapRézo society, co-dir) and Rodolphe De Carini (CapRézo society, co-dir)

PhD in progress: Radu Carpa, *Efficacité énergétique des échanges de données dans une fédération d'infrastructures distribuées à grande échelle*, 10/2014, Laurent Lefèvre (dir), Olivier Glück (co-dir).

PhD in progress: Sylvain Gault, *Improving MapReduce Performance on Clusters*, 11/2010, Frédéric Desprez (dir), Christian Pérez (co-dir).

PhD in progess: Maurice Djibril Faye, *Déploiement auto-adaptatif d'intergiciel sur plateforme élastique*, Eddy Caron (dir), Ousmane Thiaré (Université Gaston Berger, St Louis, Sénégal, co-dir)

PhD in progress, Vincent Lanore, *Adaptation et dynamicité dans les modèles à composants logiciels pour les applications scientifiques*, C. Pérez.

PhD in progress, Arnaud Lefray, *Mission fonctionnelle et de sécurité dans une informatique en nuage*, Eddy Caron (dir), Christian Toinard (ENSIB, co-dir)

PhD in progress : Anthony Simonet, *Exécution efficace d'applications de traitement intensif de données sur des infrastructures distribuées hybrides*, 10/2011, Gilles Fedak.

PhD in progress: Jonathan Pastor (Nantes), *Conception d'un système de gestion autonomique, coopérative et distribué pour les centrales numériques à large échelle*, 11/2012, Frédéric Desprez, Adrien Lèbre (Ascola, Nantes, co-dir).

PhD in progress: Pedro Silva, *Application model and co-scheduling algorithm for dynamic and evolutive data-intensive application*, 10/2014, Christian Perez (dir), Frédéric Desprez (co-dir).

PhD in progress: Violaine Villebonnet, *Proportionnalité énergétique dans les systèmes distribués à grande échelle*, 9/2013, Laurent Lefevre (dir), Jean-Marc Pierson (IRIT, Toulouse, co-dir)

PhD in progress: Daniel Balouek Thomert, *Ordonnancement et éco-efficacité dans les environnements virtualisés*, Eddy Caron (dir), Laurent Lefevre (co-dir), Gilles Cieza (NewGen society, co-dir)

PhD in progress: Jérôme Richard, *Conception of a software component model with task scheduling for many-core based parallel architecture, application to the Gysela5D code*, 11/2014, Christian Perez (dir), Julien Bigot (CEA, co-dir).

9.2.3. *Juries*

Eddy Caron has been member of the following PhD Juries:

- Gautier Berthou. "Vers des communications anonymes et efficaces", Grenoble, January 2014, examinateur.
- Mandicou Ba. " Vers une structuration auto-stabilisante des réseaux ad hoc: cas des réseaux de capteurs sans fil.", Université de Reims, May 2014, examinateur.
- Vianney Kengne Tchendji. "Solutions parallèles efficaces sur le modèle CGM d'une classe de problèmes issus de la programmation dynamique", Université de Picardie Jules Verne en cotutelle avec l'Université de Yaoundé, June 2014, exminateur.

Frédéric Desprez has been member of the following PhD Juries:

- Amit Sangroya, "Towards Dependability and Performance Benchmarking for Cloud Computing Services", Grenoble, April 2014, rapporteur.
- Shubhabrata Roy, "A Complete Framework for Modelling Workload Volatility of VoD System-a Perspective to Probabilistic Management", Lyon, June 2014, examinateur.
- Loic Letondeur, "Planification pour la gestion autonomique de l'élasticité d'applications dans le cloud", Lyon, October 2014, examinateur.
- Rachid Habel, "", Mines Paris, October 2014, président.
- Radu Tudoran, "High Performance Big Data Management Across Cloud Data Centers", Rennes, December 2014, rapporteur.

- Andra Hugo, "Composability of parallel codes on heterogenous architectures", Bordeaux, December14, rapporteur.

- Damien Genet, "Design of Generic Modular solution for PDE solvers for modern architectures", Bordeaux, December 2014, examinateur.

- Lionel Boillot, "Contributions à la modélisation mathématique et à l'algorithmique parallèle pour l'optimisation d'un propagateur d'ondes élastiques en milieu anisotrope", Pau, December 2014, rapporteur.

Laurent Lefevre has been member of the following PhD Juries:

- Truong Khoa Phan: "Design and Management of Networks with Low Power Consumption", University of Nice, France, September 2014, Rapporteur.

- Frédéric Pinel: "Energy - Performance optimization for the Cloud", University of Luxembourg, July 2014, Examinateur

- Thiam Chekhou : "Anti Load Balancing for Energy-Aware Distributed Scheduling of Virtual Machines", University of Toulouse, France, July 2014, Rapporteur

- Felipe Diaz: "Cloud brokering : new value added services and pricing models", Telecom ParisTech, France, February 2014, Rapporteur

Christian Perez has been member of the following PhD Jury:

- Damien Gros: "Protection obligatoire répartie Usage pour le calcul intensif et les postes de travail", University of Orléans, France, June 2014, Rapporteur.

- Hélène Coullon: "Modélisation et implémentation de parallélisme implicite pour les simulations scientifiques basées sur des maillages", University of Orléans, France, September 2014.

- Clément Quinton: "Cloud Environments Selection and Configuration: A Software Product Lines-Based Approach", University of Lille, France, October 2014.

Frédéric Suter has been member of the following PhD Jury:

- Vinicius Pinheiro: "The management of multiple submissions in parallel systems: the fair scheduling approach", University of Sao Paulo, Brasil, February 2014, rapporteur.

9.3. Popularization

Eddy Caron has been interview by New Screens Magazine (N°9) edited by Imaginove. "Pipeline de production pour l'animation: Optimisation des temps de calcul et paralle´lisme", June 2014.

Gilles Fedak is a member of the Maison des Mathématiques et de l'Informatique steering committee.

Laurent Lefevre has been interviewed by Atlantico Web News Magazine on "Gadget ou véritable promesse ? Comment Amazon compte se chauffer grâce à l'énergie dégagée par les datas centers", September 21, 2014

HIEPACS Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. Member of the organizing committee

Olivier Coulaud has been member of the organizing committee of the first International Workshop on Dislocation Dynamics Simulations that was devoted to the latest developments realized worldwide in the field of Discrete Dislocation Dynamics simulations. This international event held in December 10th to the 12th at "Maison de la Simulation" in Saclay, France and attended by 55 participants.

9.1.2. Scientific events selection

9.1.2.1. Member of the conference program committee

Mathieu Faverge has been member of the technical program committee of the international conference HiPC'14.

Luc Giraud has been member of the scientific program committee of the international conferences HiPC'14, ICS'14, IPDPS'14, VecPar'14, PDCN'14.

Jean Roman has been member of the scientific program committee of the international conference IEEE PDP'14.

9.1.2.2. Reviewer

Luc Giraud has been involved in the first round of ANR evaluation and has performed reviewing for PRACE.

Furthermore, the HIEPACS members have contributed to the reviewing process of several international conferences: IEEE HiPC 2014, CCGRID 2015, IEEE IPDPS 2015, IEEE PDP 2014, ...

9.1.3. Journal

9.1.3.1. Member of the editorial board

Luc Giraud is member of the SIAM J. Matrix Analysis and Applications.

9.1.3.2. Reviewer

The HIEPACS members have contributed to the reviewing process of several international journals (ACM Trans. on Mathematical Software, IEEE Trans. on Parallel and Distributed Systems, Journal of Engineering Mathematics, Parallel Computing, SIAM J. Matrix Analysis and Applications , SIAM J. Scientific Comp., ...).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Undergraduate level/Licence

1. A. Esnard: Operating system programming, 36h, University Bordeaux I; Using network, 23h, University Bordeaux I.
He is also in charge of the computer science certificate for Internet (C2i) at the University Bordeaux I.

2. M. Faverge: Programming Environment, 26h, L3; Numerical Algorithmic, 30h, L3; C Projects, 20h, L3, ENSEIRB-MatMeca, France

3. P. Ramet: System programming 24h, Databases 32h, Objet programming 48h, Distributed programming 32h, Cryptography 32h at Bordeaux University.

Post graduate level/Master

1. O. Coulaud: Paradigms for parallel computing, 28h, ENSEIRB-MatMeca, Talence; Code coupling, 6h, ENSEIRB-MatMeca, Talence.

2. E. Agullo: Operating sysems, 24h, University Bordeaux I; Dense linear algebra kernels, 8h, ENSEIRB-MatMeca; Numerical Algorithms, 30h; ENSEIRB-MatMeca, Talence.

3. A. Esnard: Network management, 27h, University Bordeaux I; Network security, 27h, University Bordeaux I; Programming distributed applications, 35h, ENSEIRB-MatMeca, Talence.

4. M. Faverge: System Programming, 74h, M1; Load Balancing and Scheduling, 19h, M2, ENSEIRB-MatMeca, Talence.
   He is also in charge of the second year of Embedded Electronic Systems option at ENSEIRB-MatMeca, Talence.

5. P. Ramet: Scheduling, 8h; Numerical Algorithmic, 30h; ENSEIRB-MatMeca, Talence.
   He also give classes on Cryptography, 30h, Ho Chi Minh City, Vietnam.

6. L. Giraud: Introduction to intensive computing and related programming tools, 20h, INSA Toulouse; Introduction to high performance computing and applications, 20h, ISAE-ENSICA; On mathematical tools for numerical simulations, 10h, ENSEEIHT Toulouse; Parallel sparse linear algebra, 11h, ENSEIRB-MatMeca, Talence.

7. A. Guermouche: Network management, 92h, University Bordeaux I; Network security, 64h, University Bordeaux I; Operating system, 24h, University Bordeaux I.

8. J. Roman: Parallel sparse linear algebra, 10h, ENSEIRB-MatMeca, Talence; Parallel algorithms, 22h, ENSEIRB-MatMeca, Talence.

9.2.2. Supervision

Defended PhD thesis

1. Yohann Dudouit, *Scalable parallel elastodynamic solver with local refinement in geophysics*, defended on December 8th, advisors: L. Giraud and S. Pernet (ONERA).

2. Andra Hugo *Composabilité de codes parallèles sur plateformes hétérogènes*, defended on December 12th 2014, advisors: A. Guermouche, R. Namyst and P-A. Wacrenier.

3. Clément Vuchener, *Algorithmique de l'équilibrage de charge pour des couplages de codes complexes*, defended on February 7th 2014. advisors: A. Esnard and J. Roman.

PhD in progress :

1. Pierre Blanchard, *Fast and accurate methods for dislocation dynamics*, starting Oct. 2013, advisors: O. Coulaud and E. Darve (Stanford Univ.).

2. Bérenger Bramas, *Optimization of time domain BEM solvers*, starting Jan 2013, advisors: O. Coulaud and G. Sylvand.

3. Astrid Casadei, *Scalabilité et robustesse numérique des solveurs hybrides pour machines massivement parallèles*, starting Oct. 2011, advisors: F. Pellegrini and P. Ramet.

4. Jean-Marie Couteyen, *Parallélisation et passage à l'échelle du code FLUSEPA*, starting Feb 2013, advisors : P. Brenner (Airbus Defence and Space) and J. Roman.

5. Arnaud Etcheverry, *Toward large scale dynamic dislocation simulation on petaflop computers*, starting Oct. 2011, advisor: O. Coulaud.

6. Xavier Lacoste, *Scheduling and memory optimizations for sparse direct solver on multi-core/multigpu cluster systems*, starting Jan. 2012, advisors: F. Pellegrini and P. Ramet.

7. Alexis Praga, *Parallel atmospheric chemistry and transport model solver for massivelly platforms*, starting Oct. 2011, advisors: D. Cariolle (CERFACS) and L. Giraud.

8. Stojce Nakov, *Parallel hybrid solver for heterogeneous manycores: application to geophysics*, starting Oct. 2011, advisors: E. Agullo and J. Roman.

9. Maria Predari, *Dynamic Load Balancing for Massively Parallel Coupled Codes*, starting Oct. 2013, advisors: A. Esnard and J. Roman.

10. Louis Poirel, *Two level hybrid linear solver*, starting Nov. 2014, advisors: E. Agullo, M. Faverge and L. Giraud.

11. Fabien Rozar, *Peta and exaflop algorithms for turbulence simulations of fusion plasmas*, starting Nov. 2012, advisors: G. Latu (CEA Cadarache) and J. Roman.

12. Moustapha Salli, *Design of a massively parallel version of the SN method for neutronic simulations*, starting Oct. 2012, advisors: L. Plagne (EDF), P. Ramet and J. Roman.

13. Mawussi Zounon, *Numerical resilient algorithms for exascale*, starting Oct. 2011, advisors: E. Agullo and L. Giraud.

9.2.3. *Juries*

- HDR of B. Goglin (Université de Bordeaux) entitled "Vers des mécanismes génériques de communication et une meilleure maîtrise des affinités dans les grappes de calculateurs hiérarchiques" defended April 2014. J. Roman (examinator).

- PhD of M. Dorier (Ecole Normale Supérieure de Rennes) entitled "Addressing the challenges of I/O variability in post-petascale HPC simulations" defended December 2014. J. Roman (external referee).

- PhD of D. Genet (Université de Bordeaux) entitled "Design of generic modular solutions for PDE solvers for modern architectures" defended December 2014. J. Roman (examinator).

- PhD of P. Jacq (Université de Bordeaux) entitled "Méthodes numériques de type volumes finis sur maillages non-structurés pour la résolution de la thermique anisotrope et des équations de Navier-Stokes compressibles" defended July 2014. J. Roman (examinator).

- PhD of B. Lizé (Université Paris 13) entitled "Résolution Directe Rapide pour les Éléments Finis de Frontière en Électromagnétisme et Acoustique : $\mathcal{H}$-Matrices. Parallélisme et Applications Industrielles" defended June 2014. L. Giraud and G. Sylvand (examinator).

- PhD of P. Jolivet (Université de Grenoble et LJLL) entitled "Méthodes de décomposition de domaine. Application au calcul haute performance" defended Ocotber 2104. L. Giraud (examinator).

- PhD of R. Kanna (Manchester University) entitled "Numerical linear algebra problems in structural analysis" defended Octobre 2014. Jury: D. Silvester (internal referee) L. Giraud (external referee).

- PhD of L. Boillot (Université de Pau et des Pays de l'Adour), entitled "Contributions à la modélisation mathématique et à l'algorithmique parallèle pour l'optimisation d'un propagateur d'ondes élastiques en milieu anisotrope" defended December 2014, E. Agullo (examinator).

9.3. Popularization

In the context of HPC-PME initiative, we started a collaboration with ALGO'TECH INFORMATIQUE and we have organised one of the first PhD-consultant action implemented by Xavier Lacoste led by Pierre Ramet. ALGO'TECH is one of the most innovative SMEs (small and medium sized enterprises) in the field of cabling embedded systems, and more broadly, automatic devices. The main target of the project is to validate the possibility to use the sparse linear solvers of our team in the area of electromagnetic simulation tools developed by ALGO'TECH.

The HiePACS members have organized the PATC training session on Parallel Linear algebra at "Maison de la simulation" in Saclay from March 26th to March 28th.

<p align="center" style="color:red">KerData Project-Team</p>

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

Gabriel Antoniu

– Program Chair of the IEEE Cluster 2014 conference, Madrid, September 2014.

Luc Bougé

– Vice-Chair of the Euro-Par Steering Committee. Chair of the Euro-Par Workshop Advisory Board.

– Co-Chair of the PhD Forum of the IPDPS 2014 Conference, Phoenix, May 2014.

– Chair of the PhD Student Mentoring Program of the IEEE Cluster 2014 conference, Madrid, September 2014.

Shadi Ibrahim

– PhD Consortium Co-Chair for the 2014 CloudCom conference, Singapore, December 2014.

– Workshop Co-Chair for the 2014 ScalCom conference, Indonesia, December 2014.

Alexandru Costan

– Program Co-Chair of the BigDataCloud 2014 International workshop held in conjunction with the Euro-Par 2104 conference, Porto, August 2014.

– Submission Chair of the IEEE Cluster 2014 conference, Madrid, September 2014.

9.1.2. Scientific events selection

Gabriel Antoniu

– Program Chair of the IEEE Cluster 2014 conference (Madrid, 22–26 September 2014).

– Member of the following Program Committees: ACM HPDC 2014, ACM/IEEE CC-Grid'2014, IEEE Big Data 2014, ACM/IEEE SC'14 (Technical Program Member - Posters Committee), BigDataCloud 2014 workshop (held in conjunction with the Euro-Par 2014 conference).

Shadi Ibrahim

– Program Committee Chair of the PhD Consortium for the 2014 CloudCom.

– Member of the following Program Committees: IEEE Cluster 2014, IEEE SCC 2014, IEEE CloudCom 2014, ICPADS 2014, HPCC 2014, ICA3PP 2014, NPC 2014, MEDES 2014, ISPDC 2014, PICom-2014, SCRAMBL workshop 2014, CLOUD COMPUTING 2014.

– Other reviews: HPDC 2014, Euro-par 2014, Big Data 2014, SC14 Posters and Student Research Competition.

Alexandru Costan

– Member of the following Program Committees: ICPP 2014, IEEE CloudCom 2014, IEEE CloudCom PhD Forum 2014, ISPDC 2014, ARMS-CC workshop 2014, IEEE Cluster 2014, BigDataCloud Workshop 2014

– Other reviews: ACM HPDC 2014, EuroPar 2014, ARMS-CC, IEEE Cluster 2014, IEEE/ACM CCGrid 2014, SC14.

9.1.3. *Journal*

Luc Bougé

- Member of the Editorial Board of Scientific Programming.

Shadi Ibrahim

- Guest editors for a Special Issue on *Advanced Techniques for Cloud Data Management* in the International Journal Transactions on Large-Scale Data and Knowledge Centered Systems (TLDKS), Springer.
- Other reviews: IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Computers, IEEE Transactions on Cloud Computing, ACM Transactions on Internet Technology, Future Generation Computer Systems, IEEE Systems Journal, Journal of Supercomputing, Cluster Computing, Springer Transactions on Large-Scale Data and Knowledge-Centered Systems.

Alexandru Costan

- Other reviews: IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Cloud Computing, Future Generation Computer Systems, Concurrency and Computation - Practice and Experience, Computers and Geosciences

9.2. Teaching - Supervision - Juries

9.2.1. *Teaching*

Gabriel Antoniu

Master (Engineering Degree, 5th year): Big Data, 24 hours (lectures), M2 level, ENSAI (*École Nationale Supérieure de la Statistique et de l'Analyse de l'Information*), Bruz, France.

Master: Grid, P2P and cloud data management, 18 hours (lectures), M2 level, ALMA Master, Distributed Architectures module, University of Nantes, France.

Master: Scalable Distributed Systems, 10 hours (lectures), M2 level, SDS Module, M2RI Master Program, ENS Rennes, France.

Master: Scalable Distributed Systems, 17 hours (lectures), M1 level, SDS Module, EIT ICT Labs Master School, France.

Luc Bougé

Bachelor: Introduction to programming concepts, 24 hours (lectures), L3 level, Informatics program, ENS Rennes, France.

Master: Introduction to object-oriented high-performance programming, 24 hours (lectures), M1 level, Mathematics program, ENS Rennes, France.

Shadi Ibrahim

Master: Hadoop, 48 hours (Project), M1 Level, ENS Rennes, France

Master: Cloud1, Map-Reduce, 16 hours (lectures, lab sessions), M2 Level, École des Mines de Nantes, Nantes, France.

Master (Engineering Degree, 5th year): Big Data, 12 hours (lab sessions), M2 level, ENSAI (*École Nationale Supérieure de la Statistique et de l'Analyse de l'Information*), Bruz, France.

Alexandru Costan

Bachelor: Object-oriented programming, 18 hours (lectures), L3, ENS Rennes

Bachelor: Java programming, 28 hours (lab sessions), L2, INSA Rennes

Bachelor: Databases, 68 hours (lectures and lab sessions), L2, INSA Rennes, France

Bachelor: Practical case studies, 24 hours (project), L3, INSA Rennes

Master: Big Data and Applications, 36h hours (lectures, lab sessions, project), M1, INSA Rennes

Matthieu Dorier

Bachelor: Ruby Programming, 15 hours (lectures, lab sessions), L3 level, ENS Rennes.

Master: Initiation to Unix Systems, 2 hours (lab sessions), M1 level, ENS Rennes.

Lokman Rahmani

Bachelor: Java Programming, 18 hours (lab sessions), L3 level, MIAGE program, University Rennes 1, France.

Master: Distributed Programming, 48 hours (lab sessions), M1 level, GL program, University Rennes 1, France.

9.2.2. Supervision

PhD defended: Matthieu Dorier, *Addressing the Challenges of I/O Variability in Post-Petascale HPC Simulations*, thesis started in October 2011 co-advised by Gabriel Antoniu and Luc Bougé. Defended on December 9, 2014.

PhD defended: Radu Tudoran, *High-Performance Big Data Management Across Cloud Data Centers*, thesis started in October 2011, co-advised by Gabriel Antoniu and Luc Bougé. Defended on December 10, 2014.

PhD in progress: Álvaro García Recuero, *Scalable, Power-efficient Big Data Analysis on Geographically Distributed Clouds*, thesis started in October 2013, co-advised by Shadi Ibrahim and Gabriel Antoniu.

PhD in progress: Lokman Rahmani, *Big Data Management for Next-Generation High-Performance Computing Systems*, thesis started in October 2013 co-advised by Gabriel Antoniu and Luc Bougé.

PhD in progress: Luis Eduardo Pineda Morales, *Efficient Big Data Management for Geographically Distributed Workflows*, thesis started in January 2014, co-advised by Alexandru Costan and Gabriel Antoniu.

PhD in progress: Tien-Dat Phan, *Green Big Data Processing in Large-scale Clouds*, thesis started in October 2014, co-advised by Shadi Ibrahim and Luc Bougé.

PhD in progress: Orçun Yildiz, *Energy-Efficient Big Data Management in Petasacle Supercomputers and Beyond*, thesis started in September 2014, co-advised by Shadi Ibrahim and Gabriel Antoniu.

9.2.3. Juries

Gabriel Antoniu served as a member of Inria's Junior Researcher (CR2) Admissibility Jury for the Rennes and Grenoble Research Centers and of Inria's Junior Researcher Admission Jury (CR1 and CR2, all centers).

Luc Bougé served as a jury member for several PhD and HDR defenses, in many cases as the jury chairman.

9.2.4. Miscellaneous

Gabriel Antoniu served as a member of Inria's Evaluation Committee.

Shadi Ibrahim served as a member of Inria's Post-Doc Evaluation Committee since 2014.

Shadi Ibrahim served as a member of jury for L3 internship at ENS Rennes, September 2014.

Shadi Ibrahim is giving a Tutorial on *Green Big Data Processing using Hadoop: An introductory tutorial* at the Middleware 2014 conference, Bordeaux, France, December 2014 (with Anne-Cécile Orgerie).

Matthieu Dorier served as a member of jury for L3 internship at ENS Rennes, September 2014.

9.3. Popularization

- Gabriel Antoniu

  Microsoft Research, Redmond. Invited presentation at the Workshop on *E-Science in the Cloud*. Subject: Big Data management in the Cloud (A-Brain and Z-CloudFlow projects). Audience: engineers, students and researchers, from academia and industry (April 2014).

  ORAP Forum. Invited Speaker. *Big Data: Concepts-clés et enjeux* (April 2014).

  Radio France. Invited interview about Big Data at the *Labo des savoirs*. Available on line at http://labodessavoirs.fr/chroniques-et-reportages/un-nouveau-paradigme/.

  Institut Français de Bio-informatique, Grand-Ouest, Rennes. Invited presentation at the *12e Rencontres des plates-formes de Bioinformatique du Grand Ouest* about the team's experience with the Microsoft Azure cloud platform (November 2014).

- Shadi Ibrahim

  Parallel and Distributed Computing Centre (PDCC), Nanyang Technological University (NTU), Singapore. Invited seminar. Subject: *Consistency Management for Big Data Applications in the Clouds* (January 2014).

- Alexandru Costan

  EIT ICT Labs, Rennes. Invited presentation at the Workshop on *Trusted Clouds* about *KerData Team: Scalable Data Management on Clouds and Beyond* (March 2014).

- Matthieu Dorier

  Inria, Grenoble. Invited seminar about *Damaris: data management for scientific simulations on post-Petascale supercomputers* (June 2014).

MESCAL Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. general chair, scientific chair

- Panayotis Mertikopoulos was technical program co-chair of WiOpt '14: the 12-th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks.
- Bruno Gaujal was the technical program chair of EAP 2014, Sophia-Antipolis.
- Bruno Gaujal, Florence Perronnin and Jean-Marc Vincent organized a Marmote workshop, July 9-10, 2014.
- Nicolas Gast organized a Quanticol workshop, April 14, 2014.
- Arnaud Legrand organized the Summer School on Performance Metrics, Modeling and Simulation of Large HPC Systems, Sophia-Antopolis, June 2014.
- Jean-Marc Vincent organized the Licia Workshop in Grenoble, Oct. 2014.

9.1.1.2. member of the organizing committee

- Arnaud Legrand was a workshop organizer of the 1st workshop on reproducibility in parallel computing.
- Olivier Richard was an organizer of the 2st event "Realis 2014 : Reproductibilité expérimentale pour l'informatique en parallélisme, architecture et système" during Compas 14.

9.1.2. Scientific events selection

9.1.2.1. member of the conference program committee

- Panayotis Mertikopoulos was member of the program committee of Valuetools 2014 and NetGCoop 2014.
- Bruno Gaujal was member of the program committee of of Sigmetrics 2014, Wodes 2014 and Performance 2014.
- Nicolas Gast was member of the program comittee of E-Energy 2014 and ValueTools 2014.
- Arnaud Legrand served on the committee of Compas 2014, ICPP and HiPC.
- Jean-Marc Vincent served in the committee of ASMTA 2014, SimulTech 2014, Epew 2014.
- Olivier Richard served on the committe of Compas 2014, CARLA 2014/First HPCLATAM, Grid'5000 School, Euro-Par2014WS, HPCS-14.

9.1.3. Journal

9.1.3.1. reviewer

- Team members served as reviewers for: IEEE Transactions on Information Theory, IEEE Transactions on Automatic Control, IEEE Transactions on Signal Processing, IEEE Journal on Selected Areas in Communications, Advances in Applied Probability, Games and Economic Behavior, Journal of Economic Theory, Theoretical Economics, Journal of Optimization Theory and Applications, Mathematics of Operations Research, SIAM Journal on Control and Optimization, Automatica, CCPE, IEEE Transactions on Communication, Journal of Grid Computing.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master/PhD: Panayotis Mertikopoulos, "Game Theory for the Working Economist", 35 Eq. TD, University of Athens, Department of Economic Sciences PhD program (UADPhilEcon), Athens, Greece.

Master : Bruno Gaujal, Discrete Event Systems, 18 h, (M2R), MPRI, Paris.

Master : Bruno Gaujal, Advanced Peformance evaluation, 9 h, (M2), Ensimag, Grenoble.

Master: Arnaud Legrand, Parallel Systems, 21 h, (M2R), Mosig.

Master: Arnaud Legrand and Jean-Marc Vincent, Performance Evaluation, 15 h, (M2R), Mosig.

Master: Arnaud Legrand and Jean-Marc Vincent, Probability and simulation, performance evaluation 72 h, (M1), RICM, Polytech Grenoble.

Master: Jean-Marc Vincent, Mathematics for computer science, 18 h , (M1) Mosig.

Master: Jean-Marc Vincent, workshop on the methodology in computer science research, 15 h, (M2R) Mosig.

Master : Olivier Richard, Networking, 40 Eq. TD, (M1), RICM, Polytech Grenoble

Master : Olivier Richard, Physical Computing Eq. 60 TD, L1 and M1, Joseph Fourier University and Polytech Grenoble

DU: Jean-Marc Vincent, Informatique et sciences du numérique, 20 h, (Professeurs de lycée).

E-learning

SPOC: Jean-Marc Vincent, Informatique et sciences du numérique, 6 mois, plate-forme pairformnce,rectorat de Grenoble, Professeurs de lycée, formation continue, environ 50 inscrits.

9.2.2. Supervision

PhD : Christian Ruiz, *Méthodes et outils pour des expériences difficiles sur Grid 5000: un cas d'utilisation sur une simulation hybride en electromagnétisme* Defended Dec. 15, 2014.

9.2.3. Juries

- Panayotis was a member of the jury eximanor for the Ph.D. thesis of Tatiana Seregina: "Applications of Game Theory to Distributed Routing and Delay Tolerant Networking", University of Toulouse, November 2014.

- Bruno Gaujal served as a reviewer in the PhD thesis defense of William Mangoua Sofack (Onera), Stefano Iellamo (Telecom Paris tech) and Simon Stuker (University of Toulouse).

- Olivier Ricahrd was a member of the jury eximanor for the Ph.D. thesis of George Markomanolis : "Performance evaluation of parallel applications and performance prediction through simulation", Inria/École Normale Supérieure de Lyon, January 2014.

9.3. Popularization

- fête de la science: atelier sciences manuelles du numérique.

- MathC2+: sciences manuelles du numérique.

- Interventions dans des classes de seconde sur la simulation simcity.

- participation à l'IREM de Grenoble, groupe algorithmique.

MOAIS Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

Moais has an intensive reviewing activity for a large variety of Conferences and Journals we do not detail here.

8.1.1. Scientific events organisation

8.1.1.1. General chair, scientific chair

- 11th bi-annual Workshop on new challenges in scheduling theory 2014. Chair: D. Trystram.

8.1.1.2. Member of the organizing committee

- EGPGV (Eurographics Symposium on Parallel Rendering and Visualization), Member of the steering committee of : B. Raffin.
- French Day of Visualization (visu2014.imag.fr). Member of the steering committee of : B. Raffin.

8.1.2. Scientific events selection

8.1.2.1. Member of the conference program committee

- LDAV 2014 (IEEE Symposium on Large-Scale Data Anlysis and Visualization), B. Raffin.
- ICCS 2014 (International Conference on Computational Science), B. Raffin.
- SEARIS 2014 (Workshop on Software Engineering and Architectures for Realtime Interactive Systems), B. Raffin.
- JVRC 2014 (International Join Virtual Reality Conference), B. Raffin
- COMPAS, april 22-25, 2013, Neuchatel, Switzerland, D. Trystram
- IPDPS 2014 (25th IEEE International Parallel & Distributed Processing Symposium) may 20-22, Phoenix, USA, D. Trystram.
- HCW'2014 (23th IEEE Heterogeneous Computing Workshop) may 19, 2014, Phoenix, USA, D. Trystram.
- HICOMB'2014 (13th IEEE Internat Workshop on High Performance Computational Biology) may 19, Phoenix, USA,D. Trystram.
- HICOMB'2014 (13th IEEE Internat Workshop on High Performance Computational Biology) may 19, Phoenix, USA. D. Trystram.
- ISPDC (13th Internat Symposium on Parallel and Distributed Computing) june 24-27, Porquerolles Island, France, D. Trystram.
- PMAA'14 (8th internat. workshop on Parallel Matrix Algorithms and Applications) july 2-4, Lugano, Switzerland, D. Trystram.
- OPTIM'14 (Workshop on Opt. Issues in Energy Efficient Distributed Systems) july 21-25, 2014, Bologna, Italy, D. Trystram.
- EuroMPI/ASIA sept. 9-12, 2014, Kyoto, Japan, D. Trystram.
- 26th SBAC-PAD, october 22-24, 2014, Paris, France, D. Trystram.
- CARI (12th conf on research in computer science and applied Maths), oct. 23-26, 2014, Saint Louis, Senegal, D. Trystram.

8.1.3. Journal

8.1.3.1. Member of the editorial board

- Associate Editor of the Parallel Computing journal PARCO, D. Trystram.

- Member of the Editorial Board of JPDC, D. Trystram.
- Member of the Editorial Board of Computational Methods in Science and Technology, D. Trystram.
- Member of the Editorial Board of ARIMA (revue africaine de recherche en informatique et maths appliquées), D. Trystram
- Member of the Editorial Board of IEEE Trans. Parallel and Distributed Systems TPDS, D. Trystram.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

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

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).

Licence: Bruno Raffin. 38 hours per year. Engineering school ENSIMAG.

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).

8.2.2. Supervision

Adrien Roussel. Mutli-CPUs/Multi-GPUs parallelization of numerical solvers. Co-advised by Jean-Marc Gratien (IFPEN) and Thierry Gautier.

David Beniamine (since 2013). Parallelisation Patterns and Scheduling for Real-Time Physics Simulations. Co-advised by Guillaume Huard and Bruno Raffin.

Amrit Kumar (since 2013). Analysis of work-stealing and adpative algorithms. Labex-Persyval co-advised PhD by Pascal Lafourcade (Verimag lab), Cedric Lauradoux (Inria Privatics team) and Jean-Louis Roch.

Gilles Daviet (since 2013). Parallel Macroscopic Simulations of Fibrous Materials. Co-advised by Florence Bertails-Descoubes and Bruno Raffin.

Julio Toss (since 2013). Parallel Algorithms and Data Structures for Physically Based Simulation of Deformable Objects. Join Ph.D with UFRGS, Brazil. Co-advised by Joao Comba and Bruno Raffin.

Marwa Sridi (since 2013). Parallel Algorithm Composition for Transient Mechanic Simulations. Join Ph.D with CEA, France. Co-advised by Vincent Faucher, Thierry Gautier and Bruno Raffin.

Ziad Sultan (since 2012). Hig-performance algebraic computations. Co-advised Ph.D by Jean-Guillaume Dumas (LJK Lab) and Clément Pernet.

Stefano Mor (since 2011). Analysis of work-stealing and adpative algorithms. Join Ph.D with UFRGS, Brazil. Co-advised by Jean-Louis Roch, Nicolas Maillard and Bruno Raffin

Mathieu Dreher (since 2011). In-Situ Visualization for Molecular Dynamics. Advised by Bruno Raffin.

David Glesser. Energy Aware Resource Management for HPC. Co-advised by Yianis Georgiou (BULL) and Denis Trystram.

Raphaël Bleuse. Affinity Scheduling. Co-advised by Gregory Mounié and Denis Trystram.

Millian Poquet. Enhanced Data Movements for HPC. Co-advised by Pierre-François Dutot and Denis Trystram.

Abhinav Srivastav. Persyval. Multi-objective Scheduling. Co-advised by Oded Maler (VERIMAG) and Denis Trystram.

Fernando Machado Mendonca. Locality Aware Scheduling. Co-advised by Frederic Wagner and Denis Trystram.

Alessandro Kraemer. Scheduling in the Cloud. Join Ph.D with UFPR, Brazil. Co-advised by Olivier Richard, and Denis Trystram.

8.2.3. *Juries*

- Vincent Faucher, HDR, INSA Lyon, June 2014.
- Laurent Gourvés, HDR, December 2014
- Florian Jamain,PhD, June 2014
- Rohit Babbar, PhD, October 2014
- Abdelkader Kersani, PhD, October 2014
- Florence Monna, PhD, November 2014
- Dounia Zaidouni, PhD, Decembre 2014
- Georgos Zois, PhD, December 2014)
- Marc Labadens, PhD, Ecole Polytechnique, December 2014.
- Fabien Coubard, PhD, Université Paris-Est, October 2014.

<p style="text-align:center;color:red;font-weight:bold;">ROMA Team</p>

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific council

Yves Robert is a member of the Scientifc Council of Maison de la Simulation, Saclay.

9.1.2. Scientific events organisation

9.1.2.1. General chair, scientific chair

Yves Robert is a member of the Steering Committee of IPDPS, of HCW of HeteroPar, and of Edu-EuroPar.

9.1.2.2. Member of the organizing committee

Yves Robert and Frédéric Vivien organized the *Scheduling for large-scale platforms* in Lyon, July 1-4, 2014. There were 55 participants.

Bora Uçar organized the CSC14 workshop, the *Sixth SIAM Workshop on Combinatorial Scientific Computing* in Lyon, July 21-23, 2014. There were 54 participants.

9.1.3. Scientific events selection

9.1.3.1. Responsability in conference program committees

Anne Benoit   was vice-program chair, for the track *Algorithms*, of IPDPS 2014, and workshops co-chair of ICPP 2014.

Yves Robert   was program vice-chair for the track *Algorithms* of SC'14.

Frédéric Vivien   was program vice-chair, for the algorithms track, of HiPC 2014, and was co-responsible of the stream "Algorithmes distribués, multi-agents et calcul parallèle" for ROADEF 2014.

9.1.3.2. Member of conference program committees

Anne Benoit   was a member of the program committees of the following conferences and workshops: HCW 2014, PDP 2014, Ena-HPC 2014 and CCGrid 2014.

Jean-Yves L'Excellent   was a member of the program committees of ComPAS 2014, Vecpar 2014, CSC 2014.

Loris Marchal   was a member of the program committee of IPDPS'2014 and HeteroPar'2014.

Yves Robert   was a member of the program committee of the following conferences and workshops: ISCIS'14, EduPar'14, ICCS'14, and FTXS'14.

Bora Uçar   was was a member of the program committee for MPP2014 (a workshop of SBAC-PAD2014), HiPC14, IPDPS 2014, PMAA14, and PCO 2014 (a workshop of IPDPS).

Frédéric Vivien   was a member of the program committee of the following conferences and workshops: SC'14, posters of SC'14, IPDPS 2014, ComPAS'2014, PDP 2014, and EduHPC'14.

9.1.4. Roles in international organizations

Bora Uçar was elected as the Secretary of the SIAM activity group on Supercomputing. (1 January 2014–12 December 2015). He was also appointed as the member of the steering committee of Combinatorial Scientific Computing.

9.1.5. Journal

9.1.5.1. Member of the editorial board

Anne Benoit　 is an associate editor of the *Journal of Parallel and Distributed Computing (JPDC)* and of the *Journal of Sustainable Computing: Informatics and Systems (SUSCOM)*.

Yves Robert　 is an associate editor of *International Journal of High Performance Computing Applications (IJHPCA)*, *International Journal of Grid and Utility Computing (IJGUC)*, and *Journal of Computational Science (JOCS)*.

Frédéric Vivien　 is an associate editor of *Parallel Computing*.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence: Anne Benoit, Systèmes et Réseaux, 48h, L3, École normale supérieure de Lyon, France.

Licence: Yves Robert, Algorithmes, 48h, L3, École normale supérieure de Lyon, France.

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

Master: Frédéric Vivien, Algorithms for High-Performance Computing Platforms, 36 h, M2, École normale supérieure de Lyon, France.

Master: Bora Uçar, Combinatorial Scientific Computing, 36 h, M2, École normale supérieure de Lyon, France.

9.2.2. Supervision

PhD: Guillaume Aupy, Resilient and energy-efficient scheduling algorithms at scale, École normale supérieure de Lyon, September 16, 2014, Anne Benoit and Yves Robert.

PhD: Dounia Zaidouni, Combining checkpointing and other resilience mechanisms for exascale systems, December 10, 2014, École normale supérieure de Lyon, Frédéric Vivien and Yves Robert.

PhD: Wissam M. Sid-Lakhdar, Scaling the solution of large sparse linear systems using multi-frontal methods on hybrid shared-distributed memory architectures, December 1 2014, Jean-Yves L'Excellent.

PhD in progress: Aurélien Cavelan, Algorithms for detecting and correcting silent errors, September 1, 2014, Anne Benoît and Yves Robert.

PhD in progress: Oguz Kaya, Parallel and Distributed Sparse Tensor Computations, September 1, 2014, Yves Robert and Bora Uçar.

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

9.2.3. Juries

Bora Uçar was a member of the PhD defense committee of Clément Vuchener as a "rapporteur", Université de Bordeaux, École doctoral de mathématiques et d'Informatique.

Yves Robert was a member of the HdR defense committee of Frédéric Suter, ENS Lyon.

RUNTIME Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. General chair, scientific chair

Emmanuel JEANNOT was a program chair of Heteropar 2014.

9.1.1.2. Member of the steering committee

Emmanuel JEANNOT is member of the steering committee of Euro-Par and Cluster.

9.1.2. Scientific events selection

9.1.2.1. Member of the conference program committee

Brice GOGLIN was a program committee member of ICCCN 2014, EuroMPI/ASIA 2014, CARLA 2014, HiPC 2014, Hot Interconnects 2014 and Cluster 2014. Emmanuel JEANNOT was a program committee member of CCGRID'2014, EuroMPI/ASIA 2014, HiPC 2014, Compas 2014. Samuel THIBAULT was a program committee member of IPDPS 2014, HIPC 2014 and MuCoCos 2014. Alexandre DENIS was a program committee member of HiPC 2014, Heteropar 2014, and Realis.

9.1.2.2. Reviewer

The members of the team reviewe numerous papers for various internationcal conferences such as IPDPS, Super-Computing, Euro-Par, ICPP

9.1.3. Journal

9.1.3.1. Member of the editorial board

Emmanuel JEANNOT is associate editor of the International Journal of Parallel, Emergent and Distributed Systems

9.1.3.2. Reviewer

Emmanuel JEANNOT was reviewer of IEEE TPDS, Parallel Computing, JPDC, IJPP. Samuel THIBAULT was reviewer for IJHPC.

9.1.4. Scientific project selection

9.1.4.1. Reviewer

Olivier AUMAGE reviewed a project proposal for the CORE 2014 call of Luxembourg's FNR research funding agency.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Members of the RUNTIME project gave thousands of hours of teaching at the University of Bordeaux and the IPB engineering school, covering a wide range of topics from basic use of computers and C programming to advanced topics such as operating systems, parallel programming and high-performance runtime systems.

9.2.2. Supervision

HDR: Brice Goglin, Towards generic Communication Mechanisms and better Affinity Management in Clusters of Hierarchical Nodes [9], 2014/04.

PhD: Bertrand Putigny, Benchmark-driven Approaches to Performance Modeling of Multi-Core Architectures [10], 2014/03, Denis Barthou and Brice Goglin.

PhD: Andra Hugo , Composability of parallel codes over heterogeneous platforms, 2014/12, Abdou Guermouche and Pierre-André Wacrenier and Raymond Namyst.

PhD in progress: François Tessier , Placement d'applications hybrides sur machine non-uniformes multicœurs, 2011/10 Emmanuel Jeannot and Guillaume Mercier

PhD in progress : Paul-Antoine Arras , Development of a Flexible Heterogeneous System-On-Chip Platform using a mix of programmable Processing Elements and harware accelerators. 2011/10, Emmanuel Jeannot and Samuel Thibault

PhD in progress: Corentin Rossignon , Design of an object-oriented runtime system for oil reserve simulations on heterogeneous architectures, 2012/04, Olivier Aumage and Pascal Hénon (TOTAL) and Raymond Namyst and Samuel Thibault

PhD in progress: Emmanuelle Saillard , Analyse statique/dynamique/itérative pour la validation et l'amélioration des applications parallèles multi-modèles sur supercalculateur hybride de type cluster de CPUs/GPUs, 2012/10, Patrick Carribault (CEA/DAM), Denis Barthou

PhD in progress: Grégory Vaumourin , Hiérarchie mémoire hybride et gestion dynamique de données dans les architectures parallèles embarquées, 2013/10, Thomas Dombek (CEA/DACLE), Denis Barthou

PhD in progress: Soufiane Baghdadi , Collaboration entre compilateur et support d'exécution pour les applications parallèles 2011/10, Elisabeth Brunet (Telecom SudParis), Jean-François Trahay (Telecom SudParis) , Denis Barthou

PhD in progress: Marc Sergent , Passage à l'échelle de moteur d'exécution à base de graphes de tâches, 2013/09, Olivier Aumage , David Goudin (CEA/CESTA), Samuel Thibault , Raymond Namyst

PhD in progress: Suraj Kumar , Stratégies d'ordonnancement dynamique pour l'algèbre linéaire dense, 2013/12, Emmanuel Agullo , Olivier Beaumont , Samuel Thibault

PhD in progress: Pei Li , High-Performance Code Generation for Stencil Computations on Heterogeneous Multi-device Architectures, 2012/10, Raymond Namyst , Elisabeth Brunet (Telecom SudParis)

PhD in progress: Christopher Haine, Estimating efficiency and automatic restructuration of data layout, 2014/01, Olivier Aumage, Denis Barthou

PhD in progress: Jérôme Richard, Conception of a software component model with task scheduling for many-core based parallel architecture, application to the Gysela5D code, 2014/11, Christian Perez (LIP/ENSL), Julien Bigot (Maison de la Simulation), Olivier Aumage, Guillaume LATU (IRFM).

9.2.3. Juries

Denis BARTHOU was member of PhD defense jury of the following candidates:

- Cédric Valensi (UVSQ, President)

Brice GOGLIN was member of the PhD defense jury of the following candidates:

- Sylvain Didelot (UVSQ, Reviewer)
- Robert Rey Exposito (Universidade Da Coruna, Examinator)

Emmanuel JEANNOT was member of the PhD defense jury of the following candidates:

- Georges Markomanolis (ENS-Lyon, Reviewer)
- Aleksandar Ilic (Univ. Of Porto, Reviewer)
- Sergio Aldea Lopez (Univ. Of Valladolid, Reviewer)
- Sabastien Valat (UVSQ, Examinator)
- Cristian Ruiz (Univ. Of Grenoble, President)

Samuel THIBAULT was member of PhD defense jury of the following candidates:

- Florence Monna (LIP6, Examinator)

9.3. Popularization

Brice GOGLIN is in charge of the diffusion of the scientific culture for the Inria Research Center of Bordeaux. He is also a member of the national Inria committee on Scientific Mediation. He gave numerous talks about high performance computing and research careers to general public audience and school student, as well as several radio and paper interviews about Inria's activities. He is also involved in the popularization of computer programming and robotics programming and gave several wide audience seminar on these topics.

Brice GOGLIN gave talks about Software releases and Source version control with GIT in internal Inria seminars.

Samuel THIBAULT gave a talk about the structure of Internet and questions of security at "Unithé ou Café"

Olivier AUMAGE gave a talk at Seminar Modeling, at the Maison de la Simulation on the StarPU Runtime System.

Runtime organized a 2-days PRACE Advanced Training Center session where several member of the team gave talks about programming heterogeneous parallel architectures with tools such as StarPU and hwloc.

<p style="text-align:center">**TYREX Project-Team**</p>

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. Member of the organizing committee

C. Roisin is a member of the steering committee of the ACM Symposium on Document Engineering.

8.1.2. Scientific events selection

8.1.2.1. Chair of conference program committee

P. Genevès is the PC Chair of the ACM Symposium on Document Engineering 2015.

8.1.2.2. Member of the conference program committee

P. Genevès is member of the external review committee for the 42nd ACM Symposium on Principles of Programming Languages (POPL'15).

P. Genevès and N. Layaïda are program committee members for the 14th ACM Symposium on Document Engineering (DocEng'14).

8.1.2.3. Reviewer

P. Genevès has been referee for International Colloquium on Automata, Languages and Programming (ICALP)

P. Genevès has been referee for International Conference on Relational and Algebraic Methods in Computer Science (RAMiCS).

8.1.3. Journal

8.1.3.1. Reviewer

N. Layaïda has been a referee for the Communications of the ACM.

P. Genevès has been a referee for Engineering Science and Technology (Elsevier).

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Licence: C. Roisin, Computer Networks, 100h/year, L2, University of Grenoble, France

Licence: C. Roisin, Pedagogical manager of the Professional Licence "MESSI" and Academic-side tutoring of several apprentices of this licence, University of Grenoble, France

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

Licence: N. Gesbert, Algorithmics, 60h/year, L3, University of Grenoble, France

Licence: N. Gesbert, Academic-side tutoring of an apprentice, 10h/year, University of Grenoble, France

Master: N. Gesbert, Logic, 45h/year, M1, University of Grenoble, France

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

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

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

8.2.2. Supervision

HdR: P. Genevès, Static Analysis for Data-Centric Web Programming, Université de Grenoble Alpes, 21 November 2014.

PhD in progress: D. Graux, Large scale evaluation of semantic web queries, since November 2013, N. Layaïda and P. Genevès

PhD in progress: N. Guido, Semantic Query-Update Independence Analysis under Constraints, since October 2012, C. Roisin and P. Genevès

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

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

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

8.2.3. Juries

N. Layaïda has been reviewer for the PhD thesis of Houari Mahfoud, Efficient Access Control to XML Data: Querying and Updating Problems, Université de Lorraine, supervisors: Abdessamad Imine and Michael Rusinowitch. 18 February 2014.

N. Layaïda has been committee member of the HdR of P. Genevès, Static Analysis for Data-Centric Web Programming, Université de Grenoble Alpes, 21 November 2014.

C. Roisin has been reviewer for midterm PhD thesis of Mira Sarkis, Supervised by Jean-Claude Dufourd and Cyril Concolato, Télécom Paristech, Paris, 2014.

8.3. Popularization

M. Razafimahazo developed a mobile application for the pupils of the école de la paix, Grenoble. The application uses Augmented Reality for cultural heritage tour of Grenoble City with content produced by pupils.

M. Razafimahazo Animated a brainstorming during CitizenTIC around OpenStreetMap crowd-sourcing: "Les cartes changent la donne autour des parcours accessibles dans l'agglomération Grenobloise".

N. Layaïda animated several workshops on Open Linked Data for Grenoble City and Grenoble Agglomeration (La métro).

We received two pupils from secondary school, Jeremy Andreoletti and Hugo Kersaudy, for a one week initiation to research. We hosted several pupils from the primary school for a one day for a presentation and demos.

8.3.1. Institutional commitment:

C. Roisin Board member of the University Pierre Mendes-France, University of Grenoble, in charge of IT systems and TICE.

C. Roisin is President of the disciplinary commission of the University Pierre Mendes-France, University of Grenoble.

N. Layaïda is member of the Scientific Board of Advanced Data-mining of the Parsyval Labex.

N. Layaïda is member of the experts pool (selection committee) of the minalogic competitive cluster.

ASCOLA Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. General chair, scientific chair

- A. Lebre and M. Sellami organized cloudDays@Nantes. Supported by the ASR System consortium and the Inria Large Scale Initiative Hemera, this two day national event gathered 25 researchers and phd students to discuss about latest results in Virtualization and Cloud Computing [0].
- A. Lebre was local chair of the 2014 Simgrid Users Days (30 participants).
- J.-C. Royer and M. Sellami were co-chair of the first PACS track (Privacy and Accountability for Software and Cloud Services) at WETICE 2014.

9.1.1.2. Member of the organizing committee

- Green Lab Center: T. Ledoux and J.-M. Menaud are members of the board of the Green Lab Center association. This association promotes and disseminates Green IT practices and research prototypes to the world of education, research and companies [0].
- M. Südholt has been a member of the steering committee of the international conference Modularity.

9.1.2. Scientific events selection

9.1.2.1. Member of the conference program committee

- A. Lebre was member of the program committees of IEEE IC2E 2014, SCRAMBL 2014, IEEE BigData 2014, IEEE CloudCom 2014, and IEEE BDCLoud 2014.
- T. Ledoux was member of the program committees of the following conferences: the 29th Symposium On Applied Computing (SAC'14) - track Software Engineering Aspects of Green Computing, the 3rd International Conference on Eco-friendly Computing and Communication Systems (ICECCS'14), the 13th Workshop on Adaptive and Reflective Middleware (ARM'14) @ Middleware, the workshop CrossCloud'14 @ INFOCOM, the workshop CrossCloud Brokers'14 @ Middleware, the 3nd International Workshop on Green and Sustainable Software (GREENS'14) @ ICSE.
- J.-M. Menaud has served on the program committee of the third SMARTGREENS 2014, IEEE ICC SAC,The Fifth CLOUD COMPUTING 2014, the third CAGing 2014, the IEEE Globecom 2014, the 5th IEEE ICICS, the first SDS, VHPC'14 and CFSE-10.
- J. Noyé has been a member of the program committee of Modularity '14.
- J.-C. Royer was a member of the program committes of WETICE 2014, CAL 2014, CIEL 2014, ICIS 2014, and JLDP 2014. He participated in the evaluation of a project for the Israel Science Foundation.

9.1.3. Journal

9.1.3.1. Member of the editorial board

- M. Südholt has been a member of the editorial board of the Springer journal "Transactions of Aspect-Oriented Software Development" (TAOSD).

9.1.3.2. Reviewer

- A. Lebre has been a reviewer for the JPDC and the Cluster Computing Journals.

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[0] CloudDays@Nantes, 2014.
[0] Green Lab Center

- J. Noyé has been a reviewer for "Transactions on Aspect-Oriented Software Development", "Software: Practice and Experience" and "Science of Computer Programming".
- M. Südholt has been a reviewer for IEEE "Transactions in Software Engineering" (TSE) and the Springer journal "Transactions on Aspect-Oriented Software Development" (TOASD).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

The team is involved in the following undergraduate and graduate-level programs at Mines Nantes and University of Nantes (the institutions all of eaching staff belongs to):

- The team is a main contributor to the **engineering program of EMN**.
- Within this engineering program, the team is steering, chairing and the main contributor to a two-year **graduate-level informatics specialization**. H. Grall is managing this program.
- Since 2009 our team has defined and set up a new three-year **engineering program on software engineering**. T. Ledoux is managing this program.

The team has also been involved in the following MSc programs that have been carried out with partners from French and foreign universities:

- The team participates in the **MSc program "Alma"** on software architecture and distributed systems, a joint program steered by colleagues from University of Nantes. In this context, we are responsible for a 48-hour module on advanced software composition and take part in the program's governing board. M. Südholt is managing the participation of Mines Nantes in this program.
- Members of the team have taught different **courses at different study levels in Rennes** mainly organized by University of Rennes and the research institutes IRISA and Inria.

ASCOLA members have taught for about 210 hours on average in 2014 (hours of presence in front of students). Hereby, we have taken into account that researchers and some professors have not taught at times. In addition, another significant part of the program is taught by temporary and external staff, whose participation is managed by ASCOLA members.

In addition, J. Noyé was deputy for teaching of the Computer Department until March, 31.

9.2.2. Supervision

The team has been supervising 18 PhD thesis in 2014, of which six have been co-supervised with external partners (three with foreign partners from U. Chile; TU Darmstadt, Germany; VU Brussel, Belgium), two with another Inria team (Myriads from Rennes) and one with the French TASC team from Mines Nantes.

Six PhD theses have been defended this year. Mayleen Lacouture on chemical programming for the web; Guilhem Jaber on the extension of logics for theorem provers using forcing; Diana Allam on service interoperability and securing service compositions; Guillaume Le Louët on energy management in data centers; Ismaël Figueroa on formal approaches for correct software composition; Charles Prud'homme on the structuring of constraint solvers.

Two members of the team have been preparing an HDR in 2014 for a defense in 2014.

9.2.3. Juries

- J.-C. Royer was a member of the PhD committees of Cosmin Dumitrescu (Université Paris I), Hamzeih Eyal Salman (Université de Montpellier II), Diana Allam (Mines de Nantes), Ahmad Kheir (Université de Nantes and Université Libanaise), and Hamza Samih (Université de Rennes I).
- A. Lebre was a member of the PhD committee of Alexandre Lissy, "Utilisation de méthodes formelles pour garantir des propriétés de logiciels au sein d'une distribution : exemple du noyau Linux", University of Tours, March 2014.

- J.-M. Menaud was a reviewer of the PhD of : Gueérout Tom (Dec. 5, 2014 on "Ordonnancement sous contraintes de Qualite´ de Service dans les Clouds" in Toulouse), Sébastien Schinella (Dec. 2, 2014 on "Contribution a` l'étude de l'Efficacite´ énergétique des Services TIC" in Paris), Aurélien Wailly (Sep. 15, 2014 on "Architecture de se´curite´ de bout-en-bout pour les environnements cloud" in Paris), Djawida Dib (Jul. 7, 2014 on "Optimizing PaaS Provider Profit under Service Level Agreement Constraints" in Rennes), Tran Giang Son (Jun. 4, 2014 on "Cooperative Resource Management in the Cloud" in Grenoble), Amit Sangroya (Apr. 24, 2014 on "Towards Dependability and Performance Benchmarking for Cloud Computing Services" in Grenoble).

- M. Südholt has served as reporting member of the examination committee of Mohamed Aly at TU Darmstadt, Germany, in Nov. 2014.

<p align="center" style="color:red">DIVERSE Project-Team</p>

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. general chair, scientific chair

Benoit Combemale:

- chair for the program committee of SLE'14, the 7th International Conference on Software Language Engineering (SLE), Sweden, October 2014.
- co-chair of the demonstration track of the 17th International Conference on Model Driven Engineering Languages and Systems (MODELS), Spain, October, 2014.
- co-chair of the workshop GEMOC, co-located with the 17th International Conference on Model Driven Engineering Languages and Systems (MODELS), Spain, October, 2014.
- co-chair of the Dagstuhl seminar #14412 on *Globalizing Domain-Specific Languages*, Germany, October, 2014.
- co-chair of MDD4DRES 2014, the International School on Model-Driven Development for Distributed Realtime Embedded Systems, France, September, 2014.

Benoit Baudry:

- Co-chair of the PC, New Ideas and Emerging Results (NIER) track at ICSE'14
- Chair of the doctoral symposium, International Conference on Model Driven Engineering, Languages and Systems (MODELS)
- Member of the Steering committee, International Conference on Model Driven Engineering, Languages and Systems (MODELS)

Jean-Marc Jézéquel:

- co-chair of the Dagstuhl seminar #14412 on *Globalizing Domain-Specific Languages*, Germany, October, 2014.

9.1.1.2. member of the organizing committee

Mathieu Acher has organized the SPLTea workshop (co-located with the Software Product Line Conference) and Journée ligne de produits (7th edition) in Paris (Sorbonne).

9.1.2. Scientific events selection

9.1.2.1. responsable of the conference program committee

Jean-Marc Jézéquel has been a member of the program board:

- MODELS 2014, The 17th International Conference on Model Driven Engineering Languages and Systems Valencia, Spain, October 2014 (PB)
- ICSE 2014 The 36th International Conference on Software Engineering, Hyderabad, India, June 2014 (PB)

Benoit Baudry:

- Member of the Steering committee, International Conference on Model Driven Engineering, Languages and Systems (MODELS)

9.1.2.2. member of the conference program committee

Benoit Baudry:

- International Conference on Automated Software Engineering (ASE)
- International Conference on Model Driven Engineering, Languages and Systems (MODELS)
- International Working Conference on Requirements Engineering: Foundation for Software Quality (REFSQ)

Mathieu Acher:

- ICSE'15 (NIER) : 37th International Conference on Software Engineering - New Ideas and Emerging Results (NIER)
- ICSE'14 (NIER) : 36th International Conference on Software Engineering - New Ideas and Emerging Results (NIER)
- ICSE'14 (SEIP) : 36th International Conference on Software Engineering - Software Engineering In Practice (SEIP)
- SPLC'14 : 18th International Software Product Line Conference
- SEAA'14 : Euromicro Conference series on Software Engineering and Advanced Applications
- FOSD'14 : Sixth International Workshop on Feature-Oriented Software Development (at ASE)
- SPLTea : First International Workshop on Software Product Line Teaching
- REVE'14 : 2nd International Workshop on Reverse Variability Engineering (at SPLC)
- JLDP'14 : Journee Lignes de Produits (Luxembourg)

Olivier Barais:

- HPCC'14, The 16th IEEE International Conference on High Performance Computing and Communications, Paris, France
- SEAA'14, The 40th Euromicro Conference on Software Engineering and Advanced Applications (SEAA 2014) Verona, Italy 2014
- SAC'14, The 29th Symposium On Applied Computing Gyeongju, Korea.
- SPLat 2014, The 1st International Workshop on Software Product Line Analysis Tools, Convitto della Calza, sala Franciabigio
- VAO'14, The 2nd Workshop on View-Based, Aspect-Oriented and Orthographic Software Modelling, York, United Kingdom
- WEITICE'2014, the 23rd IEEE International Conference on Collaboration Technologies and Infrastructure University Campus Parma, Italy
- CIEL'14, the 3rd French Conference in Software Engineering. CNAM, Paris,
- CAL'14, the 5th French Conference in Software Architecture. Paris,

Arnaud Blouin:

- IEEE International Workshop on User Centered Design and Adaptive Systems (UCDAS), 2014

Johann Bourcier:

- PECCS 2013

Benoit Combemale:

- APSEC'14, The 21st Asia-Pacific Software Engineering Conference, Korea, 2014.
- ICMT'14, The 7th International Conference on Model Transformation, UK, 2014.
- ECMFA'14, The 10th European Conference on Modelling Foundations and Applications, UK, 2014.
- VOLT workshop on Verification Of ModeL Transformation (VOLT), at STAF'14, UK, 2014.
- CSP Trask at the WETICE'14, Italy, 2014.

Jean-Marc Jézéquel:

- Formal Demonstrations of ICSE 2014 The 36nd International Conference on Software Engineering, Hyderabad, India, June 1-7, 2014
- VaMoS 2014 The 8th International Workshop on Variability Modelling of Software-intensive Systems January 22-24, 2014 - Nice, France
- SLE 2014 7th International Conference on Software Language Engineering (SLE) September 15-16, 2014 Västerås, Sweden
- GPCE 2014 13th International Conference on Generative Programming: Concepts & Experiences September 15-16, 2014 Västerås, Sweden

Noël Plouzeau:

- CBSE 2014, Component Based Software Engineering, Lille, France, june 2014.

9.1.2.3. reviewer

Arnaud Blouin:

- EICS'14, ACM SIGCHI symposium on Engineering interactive computing systems.
- NordiCHI'14, Nordic Conference on Human-Computer Interaction.
- IHM'14, French speaking conference on human-computer interaction.
- ASPEC'14, Asia-Pacific Software Engineering Conference.

Benoit Combemale: external reviewer for ICSE'13 (International Conference on Software Engineering).

9.1.3. Journal

9.1.3.1. member of the editorial board

Benoit Baudry is an Associate Editor of the following journal:

- Journal of Systems and Software (JSS)
- Journal on Software and System Modeling (SoSYM)

Jean-Marc Jézéquel is Associate Editor-in-Chief of

- Journal on Software and System Modeling (SoSYM)

Jean-Marc Jézéquel is an Associate Editor of the following journal:

- IEEE Computer
- Journal of Systems and Software (JSS)
- Journal of Object Technology: JOT

Noël Plouzeau is chief editor of a special issue of the TSI French research journal, dedicated to software engineering.

Benoit Combemale is a member of the editorial board of the following journal:

- Elsevier's International Journal on Computer Languages, Systems and Structures (COMLAN)

9.1.3.2. reviewer

Mathieu Acher: reviewer for journals: ACM Computing Surveys, Information and Software Technology (IST), IEEE Software, Automated Software Engineering: An International Journal (ASE), Journal of Ambient Intelligence and Smart Environments (JAISE), Journal in Computers in Biology and Medicine (CBM), International Journal on Software Tools for Technology Transfer (STTT), Journal of Systems and Software (JSS), Journal of Software and Systems Modeling (SoSyM).

Olivier Barais: external reviewer for IEEE Transactions on Software Engineering, Journal of Software and Systems Modeling (SoSyM), Journal of Software System (JSS), ACM TaaS (Transactions on Autonomous and Adaptive Systems), STVR (Software Testing, Verification and Reliability).

Arnaud Blouin: external reviewer for SoSyM (Journal of Software and Systems Modeling).

Johann Bourcier: external reviewer for TaaS (Transactions on Autonomous and Adaptive Systems), and JSS (Journal of Systems and Software).

Benoit Combemale: external reviewer for IEEE Transactions on Software Engineering, Journal of Software and Systems Modeling (SoSyM).

Noël Plouzeau: external reviewer for JSS (Journal of Systems and Software).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

The DIVERSE team bears the bulk of the teaching on Software Engineering at the University of Rennes 1 and at INSA Rennes, at the levels M1 (Project Management, Object-Oriented Analysis and Design with UML, Design Patterns, Component Architectures and Frameworks, Validation & Verification, Human-Computer Interaction) and M2 (Model driven Engineering, Aspect-Oriented Software Development, Software Product Lines, Component Based Software Development, Validation & Verification, *etc.*).

Each of Jean-Marc Jézéquel, Noël Plouzeau, Olivier Barais, Johann Bourcier, Arnaud Blouin, and Mathieu Acher teaches about 200h in these domains, with Benoit Baudry and Benoit Combemale teaching about 50h, for a grand total of about 1300 hours, including several courses at ENSTB, Supelec and ENSAI Rennes.

Noël Plouzeau is the leader of the final year of the Master Pro in Computer Science at the University of Rennes 1.

Johann bourcier is co-manager of the Home-Automation option at the ESIR engineering school in Rennes.

Mathieu Acher is in charge of teaching services of ISTIC.

The DIVERSE team also receives several Master and summer trainees every year.

9.2.2. Supervision

HDR: Olivier Barais: *Utilisation de la modé lisation à l'exé cution : objectif, challenges et bé né fices*, 2014

HDR: Olivier Beaudoux: *Vers une programmation des systè mes interactifs centré e sur la spé cification de modè les exé cutables*, 2014

PhD: Joao Bosco Ferreira Filho, *Variability modeling in software-intensive systems*, thèse 2011-2014, O. Barais, B. Baudry and M. Acher

PhD: Emmanuelle Rouillé, *Processus Logiciels dirigés par les intentions*, thèse CIFRE avec SodiFrance, 2010-2014, J.-M. Jézéquel, B. Combemale and O. Barais

PhD : Julien Richard-Foy, *A DSL factory for modular Web oriented architecture*, thèse CIFRE avec Zenexity, 2011-2014, J.-M. Jézéquel and O. Barais

PhD : Hamza Samih, *Extending model-based testing with variability and security management*, thèse CIFRE avec All4Tec, 2011-2014, B. Baudry

PhD in progress : Erwan Bousse, *Intégration et combinaison des techniques de V&V dans un contexte d'ingénierie cystème*, thèse, 2012-2015, B. Baudry and B. Combemale

PhD in progress : Valéria Lelli, *On Testing Interactive Systems*, thèse 2012-2015, B. Baudry and A. Blouin

PhD in progress : Kwaku Yeboah-Antwi, *Runtime emergence of software diversity*, thèse 2013-2016, B. Baudry and O. Barais

PhD in progress : Sana Ben Nasr, *Modeling variability in regulatory requirements*, thèse 2013-2016, B. Baudry and M. Acher

PhD in progress : Guillaume Bécan, *Reverse Engineering and Evolution of Variability-intensive Software Systems*, thèse 2013-2016, B. Baudry and M. Acher

PhD in progress : Mohamed Boussaa, *An Architecture for Testing Large-Scale Dynamic Distributed Systems*, thèse 2013-2016, B. Baudry and O. Barais

PhD in progress : Thomas Degueule, *Next Generation of MDE Tooling Support*, thèse 2013-2016, O. Barais and A. Blouin

PhD in progress : David Mendez Acuna, *Variability in Modeling Languages*, thèse 2013-2016, B. Baudry and B. Combemale

PhD in progress : Ivan Paez Anaya, *Proactive Adaptation in Pervasive Environment*, thèse 2012-2015, J.Bourcier, N. Plouzeau and J.-M. Jézéquel

PhD in progress : Inti Gonzalez, *Ressources reservation in Pervasive Middleware*, thèse 2012-2015, J. Bourcier, O. Barais

PhD in progress : Jacky Bourgeois, *Automatic Synchronization of Energy Production and Consumption*, thèse 2012-2015 co-tutelle avec the Open University, J.Bourcier, B. Baudry and G. Kortuem

PhD in progress : Francisco Acosta, *Automatic Deployment and Reconfigurations in Internet of Things*, thèse 2013-2016 co-encadrement avec l'équipe ACES, J. Bourcier, F. Weis

PhD in progress : Pierre Laperdrix, *Secretless moving target against browser fingerprinting* , thèse 2014-2017, B. Baudry

PhD in progress : Johan Pelay, *Langage pour une programmation incrémentale de réseau*, thèse 2014-2017 co-encadrement avec le laboratoir B-COM, O.Barais, F. Guillemin

PhD in progress : Kévin Corre, *Modélisation de la confiance dans les services sociaux et conversationnels*, thèse 2014-2017 co-encadrement avec l'équipe AtanMod, O. Barais, G. Sunye

9.2.3. Juries

9.2.3.1. Benoit Combemale

was in the examination committee of the following PhD thesis:
- Emmanuelle Rouillé, April 2014, University of Rennes (Co-supervisor)
- Jean-Christophe Bach, September 2014, University of Nancy (Member)
- Faiez Zalila, December 2014, University of Toulouse (Member)

9.2.3.2. Jean-Marc Jézéquel

was in the examination committee of the following HDR:
- Olivier Beaudoux, August 2014, ESEO, President
- Rémi Cozot, September 2014, University of Rennes, President
- Laurent Amsaleg, November 2014, University of Rennes, President
- Maud Marchal, November 2014, University of Rennes, President
- Olivier Barais, December 2014, University of Rennes, member

9.2.3.3. Jean-Marc Jézéquel

was in the examination committee of the following PhD thesis:
- Emmanuelle Rouillé, April 2014, University of Rennes, Supervisor
- Cyrille Jegourel, November 2014, University of Rennes, President
- Minh Tu Ton That, October 2014, Université de Bretagne-Sud, President
- Julien Richard-Foy, December 2014, University of Rennes, Supervisor

9.2.3.4. Olivier Barais

was in the examination committee of the following PhD thesis:
- Emmanuelle Rouillé, April 2014, University of Rennes, Supervisor
- Julien Richard-Foy, December 2014, University of Rennes, Supervisor
- Bosco Ferreira, December 2014, University of Rennes, Supervisor

9.2.3.5. Benoit Baudry

was in the examination committee of the following HDR:

- Olivier Barais, December 2014, University of Rennes, member

9.2.3.6. Benoit Baudry

was in the examination committee of the following PhD thesis:

- Hamza Samih, December 2014, University of Rennes, Supervisor
- Bosco Ferreira, December 2014, University of Rennes, Supervisor
- Jérémie Tatibouet, Ocotber 2014, University of Paris-Sud, Referee
- Boris Baldassari, June 2014, University of Lille, Referee

9.2.3.7. Mathieu Acher

was in the examination committee of the following PhD thesis:

- Ebrahim Abbasi, February 2014, University of Namur (Belgium), Referee
- Bosco Ferreira, December 2014, University of Rennes

9.2.3.8. Johann Bourcier

was in the examination committee of the following PhD thesis:

- Koutheir Attouchi, July 2014, University of Paris 6,

9.3. Popularization

Our recent work on diversity against browser fingerprinting and the associated web site [0] have been demonstrated in two open source forums (OWF'14 [0] and FOSSA'14 [0]. Following this, our work has been mentioned in general-audience press. In particular the Clubic magazine published a complete article about our work [0], which was followed by 6000 unique visits on our web site in the following 24 hours. The work was also mentioned in Le Monde [0].

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[0] https://amiunique.org/
[0] http://www.openworldforum.paris/
[0] https://fossa.inria.fr/
[0] http://pro.clubic.com/webmarketing/publicite-en-ligne/actualite-742853-fingerprinting-cookies.html
[0] http://abonnes.lemonde.fr/sciences/article/2014/11/24/le-fossa-bazar-techno-participatif_4528568_1650684.html

FOCUS Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

M. Bravetti: Program Committee member of the following conferences. BigData 2014 (IEEE International Conference on Big Data), WWV 2014 (10th International Workshop on Automated Specification and Verification of Web Systems), WS-FMDS 2014 (4th WorkShop on Formal Methods in the Development of Software), SEFM 2014 (12th International Conference on Software Engineering and Formal Methods), WS-FM 2014 (11th Workshop on Web Services and Formal Methods), ESOCC 2014 (3rd European Conference on Service-Oriented and Cloud Computing).

Invited speaker at MOD* 2014 (1st Int. Workshop on Logics and MODel-checking for self-* systems).

Organiser of Int. Workshop on Contracts for Efficient and Reliable Services.

U. Dal Lago: Program Committee co-chair and main orgainser for FOPARA 2013: Third International Workshop on Foundational and Practical Aspects of Resource Analysis (August 29th to 31st, 2013, Bertinoro, Italy).

Program Committee member of the conferences RTA-TLCA 2014, LOLA 2014 and IFIP-TCS 2014.

PC chair for DCM 2014.

Invited speaker at the "Mathematical Structures of Computation" event in Lyon.

Lecturer at the school BISS 2014, Bertinoro, Italy, March 2014.

D. Hirschkoff: Co-organisee of the international event on 'Concurrency, Logic and Types', as part of the 'Mathematical Structures of Computation', in february 2014 in Lyon (see http://smc2014.univ-lyon1.fr/doku. php?id=week5). Several Focus members took part in the event.

E. Giachino: Program Committee member of the conference iFM 2014 and the workshops BEAT 2014 and ICE 2014.

Workshop chair for the iFM and FACS 2014.

I. Lanese: Program Committee member of the following workshops and conferences: EXPRESS/SOS 2014 (Combined 21st International Workshop on Expressiveness in Concurrency and 11th Workshop on Structured Operational Semantics), WS-FM:FASOCC 2014 (11th International Workshop on Web Services and Formal Methods: Formal Aspects of Service-Oriented and Cloud Computing), IFIP TCS 2014 (Theoretical Computer Science 2014), SAC 2014 (Service Oriented Architectures and Programming track of the 29th Annual ACM Symposium on Applied Computing).

Steering committee for the Service Oriented Architectures and Programming (SOAP) track of the Annual ACM Symposium on Applied Computing (SAC), the International Symposium on Formal Aspects of Component Software (FACS).

Co-chair of the conferences 11th International Symposium on Formal Aspects of Component Software (FACS 2014), and 7th Interaction and Concurrency Experience (ICE 2014).

Member of the editorial board of the Scientific World Journal, the Open Journal of Communications and Software, and the journal of Scientific Programming.

C. Laneve: Tutorialist at the PhD School: SFM-14:ESM (14th International School on Formal Methods for the Design of Computer, Communication and Software Systems: Executable Software Models)

M.Gabbrielli: Member of the editorial board of the Int'l Journal Theory and Practice of Logic Programming.

S. Martini: Program Committee member of International Workshop Linearity 2014. Invited speaker at the Symposium on History and Philosophy of Computing (Annual Meeting of the International Association for Computing and Philosophy), Thessaloniki, Greece.

F. Montesi: Invited speaker at WS-FM: FASOCC (11th International Workshop on Web Services and Formal Methods: Formal Aspects of Service-Oriented and Cloud Computing)

Track program chair for 28th ACM Symposium on Applied Computing (SAC) track on Service-Oriented Applications and Programming track (SOAP).

D. Sangiorgi: Member of the editorial board of the journals: Logical Methods in Computer Science, Acta Informatica, Distributed Computing, Foundations and Trends in Programming Languages, and RAIRO Theoretical Informatics and Applications.

Invited speaker at the workshops "Mathematical Structures of Computation" (Lyon, February 2014), CMCS'14 (12th International Workshop on Coalgebraic Methods in Computer Science), and "Open Problems in Concurrency Theory" (Bertinoro, Italy, June 2014).

Program Committee member of the conferences FOSSACS'14 (17th International Conference on Foundations of Software Science and Computation Structures) and LATA'14 (8th International Conference on Language and Automata Theory and Applications).

V. Vignudelli: Invited talks at the workshop "Mathematical Structures of Computation" (Lyon, February 2014), at the workshop "Open Problems in Concurrency Theory", Bertinoro, Italy, June 2014, and at the seminar series "CHoCoLa", at ENS Lyon, September 2014.

G. Zavattaro: Program Committee member of the following conferences and workshops: 11th International Workshop on Web Services and Formal Methods: Formal Aspects of Service-Oriented and Cloud Computing (WS-FM:FASOCC'14); 2014 European Conference on Service-Oriented and Cloud Computing (ESOCC'14); 2nd Workshop on Dependability and Interoperability in Heterogeneous Clouds (DIHC14), Porto, Portugal, August 25-29, 2014; 2nd IEEE International Workshop on Formal Methods Integration (FMi 2014); 7th IEEE International Conference on Cloud Computing (CLOUD 2014); 16th International Conference on Coordination Models and Languages (COORDINATION'14).

General chair of the joint conferences 11th International Symposium on Formal Aspects of Component Software (FACS 2014) and 11th International Conference on Integrated Formal Methods (iFM 2014, Bertinoro, Italy, 9–12 September 2014).

Organiser of iFM and FACS 2014 (Bertinoro, Italy, 9–12 September 2014).

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Below are the teaching activities of the Focus members during 2014.

- Mario Bravetti

  Undergraduate: "Tecnologie Web", 66 hours, 3rd year, University of Bologna, Italy.

  Master: "Applicazioni e Servizi Web", 54 hours, 2nd year, University of Bologna, Italy.

- Ugo Dal Lago

  Undergraduate: "Introduction to Programming in Python", 20 hours, 1st year, University of Bologna, Italy.

  Undergraduate: "Optimization", 36 hours, 2nd year, University of Bologna, Italy.

- Maurizio Gabbrielli

  Undergraduate: "Programming languages", 40 hours, 2nd year, University of Bologna, Italy.

  Master: "Artificial Intelligence", 60 hours, 2nd year, University of Bologna, Italy.

- Elena Giachino

    Undergraduate: "Programmazione", 40 hours, 1st year, University of Bologna, Italy.

- Ivan Lanese

    Undergraduate: "Programmazione", 32 hours, 1st year, University of Bologna, Italy.

    Master: "Business Process Management", 22 hours, 2nd year, University of Bologna, Italy.

- Cosimo Laneve

    Undergraduate: "Programmazione", 70 hours, 1st year, University of Bologna, Italy.

    Master: "Analisi di Programmi", 42 hours, 1st year, University of Bologna, Italy.

- Simone Martini

    Undergraduate: "Introduction to programming in Python", 58 hours, 1st year, University of Bologna, Italy.

    Undergraduate: "Computer abilities for biologists", 8 hours, 1st year, University of Bologna, Italy.

    Master: "Logical Foundations of Computer Science", 48 hours, 2nd year, University of Bologna, Italy.

    PhD: "Proof theory for computer scientists", 20 hours, University of Bologna, Italy.

- Jacopo Mauro

    Undergraduate: "Algoritmi e strutture dati", 20 hours, 1st year, University of Bologna, Italy.

- Giulio Pellitta

    Undergraduate: "Laboratorio di Operating Systems", 36 hours, 2nd year, University of Bologna, Italy.

    Undergraduate: "Attivita' di supporto alla didattica universitaria di Informatica nell'ambito della Piattaforma di e-learning A3", 140 hours, 1st year, University of Bologna, Italy.

- Davide Sangiorgi

    Undergraduate: "Operating Systems", 110 hours, 2nd year, University of Bologna, Italy.

    Master: "Models for concurrency", 15 hours, 2nd year, University of Bologna, Italy.

- Marco Solieri

    Master: "Administration Système", 29 hours, 3rd year, école d'ingénieurs, Institut Galilé, Université Paris 13, France

    Master: "Intranet, Internet et Web", 35 hours, 2nd year, école d'ingénieurs, Institut Galilé, Université Paris 13, France

- Gianluigi Zavattaro

    Master: "Linguaggi di Programmazione e Modelli Computazionali", 120 hours, 1st year, University of Bologna, Italy.

8.2.2. *Supervision*

PhD thesis completed in 2014:

- Michele Alberti, "On operational properties of quantitative extensions of the λ-calculus". December 2014. Joint degree: Docteur en Mathematiques, Aix-Marseille Université; Dottorato in Informatica, University of Bologna. Supervisors: L. Regnier, S. Martini.
- Ornela Dardha, "Type Systems for Distributed Programs: Components and Sessions", May 2014. University of Bologna. Supervisor: D. Sangiorgi.
- Tudor Alexandru Lascu, "Automatic deployment of applications in the cloud", May 2014. University of Bologna. Supervisor: G. Zavattaro.
- Giulio Pellitta, "Extending Implicit Computational Complexity and Abstract Machines to Languages with Control", May 2014. University of Bologna. Supervisors: U. Dal Lago and S. Martini.

Below are the details on the PhD students in Focus: starting date, topic or provisional title of the thesis, supervisor(s). These are all PhDs in progress.

- Roberto Amadini, January 2012, Constraint Programming, M. Gabbrielli.
- Ferdinanda Camporesi, January 2009, Analysis of system biology, R. Cousot (Ecole Normale, Paris) and M. Gabbrielli
- Alberto Cappai, January 2013; Security, ICC and probabilistic bisimulation, U. Dal Lago.
- Abel Garcia, January 2014, Analysis of Cloud Computing Systems, C. Laneve.
- Saverio Giallorenzo, January 2013, Safe-adaptive services and choreography languages, M. Gabbrielli.
- Jean-Marie Madiot, September 2011, Types, proofs and proof techniques for process calculi, D. Hirschkoff and D. Sangiorgi.
- Alessandro Rioli, January 2012; Bisimulation equivalence in quantum lambda calculi, U. Dal Lago.
- Marco Solieri, December 2011; Géometrie de l'interaction, réseaux, et lambda-calcul, S. Guerrini (Paris Nord) and S. Martini.
- Valeria Vignudelli, January 2014, Probabilities in Higher-Order languages, D. Sangiorgi.

8.2.3. *Juries*

U. Dal Lago has been rapporteur and member of the PhD evaluation committee for Marc Bagnol (University Aix-Marseille) and Michele Alberti (University Aix-Marseille).

D. Hirschkoff has been rapporteur for the PhD defense of J.B. Midez (December 2014, Université Aix Marseille).

G. Zavattaro has been member of the 2014 PhD evaluation committee at the department of Computer Science of the University of Genova, Italy.

8.3. Popularization

Simone Martini has carried out extended work of scientific divulgation:

- member of the technical committee of Olimpiadi del Problem Solving (at Italian Ministry of Education), http://www.olimpiadiproblemsolving.com;
- member of the technical committee of two national projects of Italian Ministry of Education, founded by ESF - European Social Fund: "Robotica educativa", and "Informatica nei licei";
- various talks at institutes and workshops on the teaching methods for Computer Science.
- coordinator of some initiatives for the 'Hour of Code', see italia.code.org and programmailfuturo.it.

D. Hirschkoff takes part in several popularization activities in schools, in Lyon (association "Maths en Jeans").

8.4. Institutional commitment

Maurizio Gabbrielli has been elected Head of the Doctoral School in the EIT ICT Labs.

<h1 style="text-align:center; color:red">INDES Project-Team</h1>

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. general chair, scientific chair

- **Ilaria Castellani** is the chair of the IFIP WG 1.8 on Concurrency Theory (of which she has been a member since its start in 2005). She is a member of the Management Committee of the european COST Action IC1201 BETTY on Behavioural Types, and the chair of the BETTY working group on Security. Since November 2014 she is also a member of the COST Action IC1405 on Reversible Computation.
- **Manuel Serrano** is the coordinator of the ANR DEFIS project PWD.
- **Tamara Rezk** is the coordinator of the security work package (WP3) of the ANR AJACS project.

8.1.1.2. member of the organizing committee

- **Ilaria Castellani** co-organised (with the WG Secretary Mohammad Reza Mousavi) the workshop TRENDS 2014 and the annual business meeting of WG 1.8, and she participated in the IFIP TC1 (Foundations of Computation) business meeting, all held in September in Rome. She was involved in the organisation of the OPCT (Open Problems in Concurrency Theory) workshop that took place in May in Bertinoro, which was co-sponsored by WG 1.8. She was also one of the organisers of the MatthewFest, a two-day workshop that took place in Lucca in October to celebrate the 65th anniversary of Matthew Hennessy. She reported on the 2013 workshop ?25 Years of Combining Compositionality and Concurrency" (WS25CCC) in the Bulletin of EATCS.
- **Tamara Rezk** organized a workshop on Programming Languages and Verification and a workshop on JavaScript Security at Inria Sophia Antipolis, on 9th and 16th December 2014.

8.1.2. Scientific events selection

8.1.2.1. member of the conference program committee

- **Manuel Serrano** served on the program committee of the *16th Practical Aspects of Declarative Languages* (PADL'14) conference, *Trends in Functional Programming*, (TFP'14) and *Web Audio Conference* (WAC'15).
- **Nataliia Bielova** was a publication chair of International Symposium on Engineering Secure Software and Systems (ESSoS 2014) and was invited to be a publication chair of ESSoS 2015.
- **Ilaria Castellani** was a member of the programme committee of the workshop BEAT 2014.
- **Tamara Rezk** served on the program committees of Computer Security Foundations (CSF'14), of International Symposium on Engineering Secure Software and Systems (ESSOS'15), and of 4th Conference on Principles of Security and Trust (POST'15).

8.1.2.2. reviewer

- **Nataliia Bielova** served as an external reviewer to the Conference on Principles of Security and Trust (POST 2014) and Computer Security Foundations Symposium (CSF 2014).

8.1.3. Journal

8.1.3.1. member of the editorial board

- **Ilaria Castellani** is a member of the editorial board of *Technique et Science Informatiques*.

8.1.3.2. reviewer

- **Nataliia Bielova** was an invited reviewer of the ACM Transactions on Information and System Security (TISSEC).
- **Tamara Rezk** was an invited reviewer of the Journal Computer Languages, Systems & Structures.

8.2. Seminars and conferences

- **Manuel Serrano** gave two seminars about Web programming in various events: "Future of Programming", Delft 2014 http://eelcovisser.org/wiki/future-of-programming/program and "9th Symposium on Future Trends in Service-Oriented Computing", Potsdam 2014. He participated in the SAC'2014 conference in Gyeongju, Korea [16], where is presented new techniques for implementing locks efficiently in higher order programming languages. He also participated in the WEBIST'14 conference in Barcelona, Spain [17], where he presented his work on multitier debugging of Web applications.
- **Bernard Serpette** gave a talk about *Unification des couleurs dans un λ-calcul polychrome* at the JFLA'14, Fréjus, France.
- **Nataliia Bielova** was invited to present her work on browser randomisation against fingerprinting at PRINCESS workshop in December 2014.
- **Ilaria Castellani** participated in the NII (the japanese National Institute of Informatics) Shonan Meeting on "Software Contracts for Communication, Monitoring, and Security", held at Shonan Village Center. In June she took part in the workshop OPCT (Open Problems in Concurrency Theory) in Bertinoro, Italy. In both cases, she gave a talk on Security for Reactive Synchronous Languages. In September, she participated in the conference TCS (Theoretical Computer Science) in Rome, where she gave a joint talk with Marco Bernardo, reporting on the IFIP WG 1.8 activities and on the OPCT workshop, in a special session dedicated to the IFIP TC1 working groups. She also attended the BEAT workshop, where her work was presented by Jorge A. Perez. She finally participated, as a co-organiser, in the workshop TRENDS 2014 and in the event MatthewFest (cf Section 9.2 below). As part of the Action BETTY, she participated in two one-day project meetings/workshops, associated with the conferences ETAPS and CONCUR respectively, and she spent a short visit to the University of Torino and another one to Trinity College, Dublin.
- **José Fragoso Santos** participated in the 29th IFIP International Conference of Information Security and Privacy (IFIP SEC'2014) in which he presented his joint work with Tamara Rezk (An Information Flow Monitor-Inlining Compiler for Securing a Core of JavaScript).

  He participated in the 9th International Symposium on Trustworthy Global Computing (TGC'2014) in which he presented his joint work with Ana Almeida Matos and Tamara Rezk (An Information Flow Monitor for a Core of DOM - Introducing References and Live Primitives).

  He gave a talk about information flow security for client-side Web applications at the LoReL group and at the LaFHIS group in the University of Buenos Aires and at the Dependable Systems Group in the University of Córdoba. José Fragoso Santos also gave a talk about information flow security for the DOM API in the Department of Computing of the Imperial College in London.

- **Tamara Rezk** was invited to Dagstuhl Seminar 14271, "Scripting Languages and Frameworks: Analysis and Verification". She gave two talks on "Hybrid Typing for JavaScript" and "Hop Operational Semantics".

8.3. Teaching - Supervision - Juries

8.3.1. Teaching

Licence : **Vincent Prunet**, *Algorithms and Data Structures*, 80 ETD, L2, Lycée International de Valbonne Sophia Antipolis (within the scope of the national Inria action to promote early CS courses in all scientific curricula), France.

Master : **Manuel Serrano**, *Programming the Diffuse Web*, 26h ETD, M2, University Paris 6 (UPMC), France.

Master : **Tamara Rezk**, *Security of Web Applications*, 36 ETD, M2, University of Nice Sophia Antipolis, France.

Master : **Tamara Rezk**, *Provable Cryptography*, 36 ETD, M2, University of Nice Sophia Antipolis, France.

Master: **José Fragoso Santos**, *Software Security*, 6 ETD, M2, of Instituto Superior Técnico University of Lisbon, Portugal.

Doctorat : **Manuel Serrano**, Hop.js, full-day seminar, *École des Jeunes Chercheurs en Programmation* ,Rennes, France.

Doctorat: **Ilaria Castellani**, Behavioural types, one-hour tutorial, Lovran School.

8.3.2. *Supervision*

PhD : **José Fragoso Santos**, *Enforcing Secure Information Flow in Client Side Web Applications*, University of Nice Sophia Antipolis, 08/12/2014, **Ana Almeida Matos** and **Tamara Rezk**.

PhD in progress : **Cyprien Nicolas**, *Orchestrating multi-tier programming languages*, University of Nice Sophia Antipolis, 1/09/2010, **Gérard Berry** and **Manuel Serrano**.

PhD in progress: **Johan Grande**, *Conception et implantation d'un langage de programmation concurrente modulaire*, University of Nice Sophia Antipolis, 1/10/2010, **Gérard Boudol** and **Manuel Serrano**.

PhD in progress: **Yoann Couillec**, *Langages de programmation et données ouvertes*, University of Nice Sophia Antipolis, 1/10/2012, **Manuel Serrano** and **Patrick Valduriez**.

PFE in progress: **Julien Chiaremello**, *Décomposition en nombres premiers en informatique quantique*, University of Nice Sophia Antipolis, 1/11/2014, **Tamara Rezk**.

Master Internship: **Diana Proteasa-Nicola** on activity monitoring within Hop applications, Polytech Nice Sophia, **Vincent Prunet**.

Inria Internship Program: **Diana Proteasa-Nicola** on Robot simulation with Hop.js, Universitatea Politehnica Timisoara, **Vincent Prunet**.

8.3.3. *Juries*

- Manuel Serrano was a reviewer of the PhD thesis of Cagdas Bozman, ENSTA, Paris. He was also a reviewer of the PhD thesis of Julien Richard Roy, University of Rennes. Manuel Serrano organized and headed the CR2 jury of Inria Sophia-Antipolis.

- Ilaria Castellani was a reviewer of the PhD thesis of Ornela Dardha, University of Bologna.

- Tamara Rezk was a reviewer (rapporteur) of the PhD thesis of Carlos Luna, University of the República, Uruguay. He was also part of the jury of the PhD thesis of José Fragoso Santos, University of Nice Sophia Antipolis.

8.4. Transfer

8.4.1. *WebRobotics*

Dissemination of the HOP technology has become a priority for the team now that HOP is actually used to develop large projects. In 2012, a further step was taken with the allocation of dedicated resources missioned to develop and transfer the application portfolio to the industry. The team has focused on bringing web awareness to personal assistance robots developed by the Hephaistos team, also at Inria CRISAM, in line with one of the top strategic orientations of Inria. Using web protocols as a native framework greatly simplifies the integration of the robot as a web entity, and the use of remote web services to manage, monitor or extend the features of the robot. The behavior of a HOP robot is specified in HOP and orchestrated within diffuse HOP run time agents embedded within the robot elements, in charge of handling communication and control between platforms and with remote web services. The project, code-named *WebRobotics*, builds on the experience gained in using HOP for home automation over the recent years, adding in 2013 the support of versatile

robotic computing platforms (integration with the ROS robot framework, development of a lightweight Hop client library providing support of web protocols to legacy software components). Among the direct benefits of relying on a web framework are the ability to use any web enabled device such as a smartphone or tablet to drive the robot. Also, it is much simpler to put in place remote diagnostic and monitoring services by leveraging on existing robot sensors and the HOP framework.

The *WebRobotics* project is now part of the RAPP FP7 european project, launched in December 2013, where Hop technology is used by several academic and SME R&D teams to develop a distributed software platform and applications for assistive robotics. Two prototypes are being developed, the first one is a personal coach robot (a Nao humanoid robot embedding Hop distributed applications), and the second one is a smart rollator (a walking aid with additional hardware and software services for rehabilitation, training and activity monitoring. The rollator hardware and robotic components are provided by Inria Hephaistos). In 2013, Indes has initiated a collaboration with other research teams (Inria STARS, Nice University Cobtek Project) and local institutes and SMEs to foster the development distributed monitoring and supervision applications with the Hop technology.

Indes has presented Hop applications for robots at the Lille Inria Industry conference day in November 2014.

PHOENIX Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events selection

8.1.1.1. Member of the conference program committee

Charles Consel:

- ICSE 2014, the 36th International Conference on Software Engineering. June 1-7, Hyderabad, India.
- ESOP 2015, the 24th European Symposium on Programming. April 11-15, 2015 London, United Kingdom.

Hélène Sauzéon:

- Conférence ITASD : des solutions numériques pour les personnes avec Autisme (Paris, Oct. 2014)
- Journées d'étude du vieillissement cognitif (Caen 2014)

8.1.1.2. Reviewer

Loïc Caroux has reviewed papers for the following conferences:

- CHI 2015 (ACM Conference on Human Factors in Computing Systems)
- HFES 2014 (International Annual Meeting of the Human Factors and Ergonomics Society)
- IHM 2014 (Conférence Francophone sur l'Interaction Homme-Machine)

8.1.1.3. Invited talks

- Consel C.: "Activity verification". Presentation at Northeastern University on human assistance, October 27, 2014.
- Sauzéon, H. and Caroux, L. (2014, Juillet). Plans expérimentaux et statistiques « pratiques ». Workshop of the Inria Project Lab Personally Assisting Living (IPL PAL), Talence, France.
- Sauzéon, H. and Consel, C. (2014) Projet DomAssist. 2ème Congrès Européen de Stimulation Cognitive – Technologies de compensation et Stimulation Cognitive, 22-23 septembre 2014, Toulouse.
- Sauzéon, H. and Consel, C. (2014) Assistance à domicile et aide à la réalisation des activités quotidiennes :le projet DomAssist. Technologies Appliquees Au Handicap : de la compensation à la participation - IFR Handicap PARIS – CNRS, 26 septembre 2014, Paris.
- Dupuy L., N'Kaoua B., Consel C., Aguilova L., and Sauzéon H. (2014). Role of cognitive reserve on everyday functioning among oldest old physically frail. XIIIème Colloque International sur le Vieillissement Cognitif – JEV, 15 et 16 septembre 2014, Caen, France.
- Congrès de Psychiatrie et de Neurologie de Langue Française Fage C., Consel C., and Sauzéon H., Collège+ : Un Assistant Scolaire pour Soutenir l'Inclusion Scolaire en Classe Ordinaire des Elèves avec Troubles du Spectre Autistique (TSA), CPNLF 2014 (Bordeaux, France, 2014).

8.1.2. Journal

8.1.2.1. Reviewer

Loïc Caroux reviewed papers for the following journals:

- Computers in Human Behavior
- Behaviour and Information Technology
- Journal of Physical Education and Sport Management

Hélène Sauzéon reviewed papers for the following journals:
- Gerontology
- BMC Geriatrics
- Applied Psycholinguistics
- Experimental Aging Research
- Journal of Speech, Language, and Hearing Research

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Licence: Hélène Sauzéon, "General Cognitive Psychology", 36h, L2/L3, Université de Bordeaux, France

Licence: Hélène Sauzéon, "Neuropsychologie Cognitive", 14h, DU, Université de Bordeaux, France

Master: Hélène Sauzéon, "Sciences cognitives du langage", "Technologies du handicap cognitif", "Facteurs humains et IHM", 120h, M1/M2, Université de Bordeaux, France

Master: Lucile Dupuy, "Fonctions congnitives en situation", 18h, M1, Université de Bordeaux, France

Master: Charles Fage, "Handicap, autonomie et technologies", 15h, M2, Université de Bordeaux, France

Master: Charles Fage, "Environnement de la recherche", 12h, M2, Université de Bordeaux, France

Master: Charles Fage, "Troubles cognitifs et handicap", 10h, M1, Université de Bordeaux, France

Master: Charles Fage, "Facteurs humains et IHM", 8h, M1, Université de Bordeaux, France

Master: Charles Fage, "Handicap et nouvelles technologies", 25h, M1, Université de Bordeaux, France

8.2.2. Supervision

PhD: Stéphanie Gatti, "Architecture en composants et qualification incrémentale", finished in February 2014, supervised by Charles Consel and Emilie Balland

PhD in progress: Paul van der Walt, "Certification d'une plateforme ouverte", started in November 2012, supervised by Charles Consel

PhD in progress: Milan Kabac, "Orchestration à grande échelle d'objets communicants", started in September 2012, supervised by Charles Consel

PhD in progress: Charles Fage, "Validation expérimentale d'un assistant numérique d'inclusion scolaire d'élèves collègiens porteurs d'autisme", started in September 2012, supervised by Hélène Sauzéon

PhD in progress: Lucile Dupuy, "DomAssist: Assistance domiciliaire pour la personne âgée et son aidant formel basée sur la technologie DiaSuiteBox", started in September 2013, supervised by Hélène Sauzéon and Charles Consel

PhD in progress: Adrien Carteron, "A development environment dedicated to assistive application", started in October 2014, supervised by Charles Consel.

PhD in progress: Cécile Magnier, "Customized technology for autonomous schooling: on longitudinal effects for students with an autism spectrum disorder", started in November 2014, supervised by Hélène Sauzéon and Charles Consel.

PhD in progress: Quentin Chisin, "Digital home assistance for young adults with Down syndrome", started in December 2014, supervised by Bernard N'Kaoua and Charles Consel.

8.2.3. Juries

Charles Consel participated in the following juries:
- Committee of the best thesis award of the "GDR GPL" (Prix de la thèse GDR GPL 2013, 2014).
- Member of the AERES Research Evaluation committee of the LIG lab (Laboratoire d'Informatique de Grenoble), December 2014.
- Thesis defense committee for Arnad Sinha, Université de Rennes 1, 28 mai 2014.

Hélène Sauzéon participated in the following juries:

- Thesis defense committee for M. Abrame, Université Paris Descartes, december 2014.
- Thesis defense committee for C. Toczé, Université Tours, december 2014.

8.3. Popularization

Various members of the Phoenix Inria project team participated in the following events:

- Charles Consel. "Presentation of the DomAssist project". Journée du Numérique organisé par Inria à l'Assemblée Nationale, Paris, France, january 21, 2014.
- Charles Consel. "Presentation of the DomAssist project". Journée de lancement de la Silver Economie Aquitaine, Bordeaux, France, february 17 2014.
- Loïc Caroux. "Des besoins de la personne âgée pour son maintien à domicile à la solution DomAssist". Semaine Nationale des Retraités et des Personnes Agées, Carbon-Blanc, France. October 2014.
- Loïc Caroux, Alexandre Spriet. "DomAssist : Plate-forme d'assistance domiciliaire pour la personne âgée et son aidant formel". Journée de la Santé Connectée en Aquitaine, Bordeaux, France. October 2014.
- Charles Consel, Hélène Sauzéon. "Assistance numérique pour compenser les déficiences cognitives à tous les âges de la vie". 2e Assises nationales de la médiation numérique : le numérique dans votre quotidien. October 16-17, 2014, Bordeaux.
- Lucile Dupuy. "Presentation of the DomAssist project". Fêtes de la science, Bordeaux, France, september-october 2014.
- Charles Fage. Production of a video-presentation of the School+ assistive platform with the Inria Communication Service. http://vimeo.com/93262450.

In addition to the following popularization actions, the DomAssist project has been presented during 2014 in two french newspapers (Sud Ouest, La Croix), and in one television report on France 3 TV.

RMOD Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. Member of the organizing committee

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

9.1.2. Scientific events selection

9.1.2.1. Member of the conference program committee

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

9.1.2.2. Reviewer

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

9.1.3. Journal

9.1.3.1. Reviewer

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

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master: C. Demarey, Architectures Logicielles, 30h (M1), GIS4, Polytech'Lille, France

Master: C. Demarey, Intégration Continue, 12h (M2), IAGL, Université de Lille 1, France

Master : Damien Cassou, Conception des applications réparties, 42h, M1, Université Lille 1, France

Licence : Damien Cassou, UV Info, 24h, L3, Telecom Lille, France

Licence : Damien Cassou, Conception orientée objet, 57h, L3, Université Lille 1, France

Master : Damien Cassou, Qualité logicielle, 30h, M2, Université Lille 1, France

Master : Damien Cassou, CAL Tests et Maintenance, 12h, M2, Université Lille 1, France

Master : Anne Etien, Système d'information objet, 22h, M1, Polytech-Lille, France

Master : Anne Etien, Bases de données, 44h, M1, Polytech-Lille, France

Master : Anne Etien, Bases de données Avancées, 12h, M1, Polytech-Lille, France

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

Licence : Camille Teruel, Conception orientée objet, 36h, L3, Université Lille 1, France

License : Damien Pollet, Programmation orientée objet, 85h, L3, Telecom Lille, France

License : Damien Pollet, Systèmes Numériques (SNUM), 11h, L3, Telecom Lille, France

Master : Damien Pollet, Ingénierie Logicielle (ILOG), 7h, M1, Telecom Lille, France

Master : Damien Pollet, Technologies de Systèmes d'Information Ouverts (TSIO), 38h, M1, Telecom Lille, France

Master : Damien Pollet, Spécification et Validation du Logiciel (SVL), 24h, M1, Université Lille 1, France

Master : Damien Pollet, Services Réseaux (SER), 28h, M2, Telecom Lille, France

Licence : Nicolas Anquetil, Interfaces et Conception Orientée Objets, 64h, L2, IUT-A/Université de Lille-1, France

Licence : Nicolas Anquetil, Analyse et conception des systèmes d'information, 24h, L2, IUT-A/Université de Lille-1, France

Licence : Nicolas Anquetil, stage, 6h, L2, IUT-A/Université de Lille-1, France

Licence : Nicolas Anquetil, Projet tutoré, 16h, L2, IUT-A/Université de Lille-1, France

Licence : Nicolas Anquetil, Conception et programmation objet avancées, 48h, L2, IUT-A/Université de Lille-1, France

Licence : Nicolas Anquetil, Projet Modélisation mathématique, 16h, L2, IUT-A/Université de Lille-1, France

Licence : Nicolas Anquetil, Introduction aux interfaces homme-machine, 32h, L2, IUT-A/Université de Lille-1, France

Licence : Jean-Christophe Bach, Conception orientée objet, 42h, L3, Université Lille 1, France

Master : Jean-Christophe Bach, Génie logiciel, 42h, M1, Université Lille 1, France

Licence : Stéphane Ducasse, Cours IAE (2014), 14h, Annecy, France

Master : Stéphane Ducasse, Cours Ecole des Mines de Douai (2014), 12h, France

Master : Stéphane Ducasse, Cours USTL L3 (2014), 4.5h, Université Lille, France

License : Stéphane Ducasse, Advanced Design, 6h, University of Delft, L3

9.2.2. Supervision

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

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

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

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

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

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

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

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

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

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

9.2.3. *Juries*

- Nicolas Anquetil: Lisong Guo, LIP6 University Pierre and Marie Currie, 12/2014 (reviewer)

- Damien Cassou: Eyvind W. Axelsen, Oslo, 05/2014 (opponent)

- Stéphane Ducasse: *Une approche pragmatique pour mesurer la qualité des applications à base de composants logiciels*, Salma Hamza, Université de Bretagne Sud, France. 18/12/14. (referee)

- Anne Etien was in the mid term examination committee of the PhD thesis: Elie Richa 09/2014 (reviewer)

9.3. Popularization

- Marcus Denker gave two presentations about Pharo at the open source conference FOSDEM 2014.

- Damien Cassou gave a Pharo tutorial at PLDI'14.

- RIC Day was held 23 September 2014 @ University of Lille 1, Lille, Anne Etien and Damien Pollet gave a presentation about Pharo, Moose and software maintenance.

- A Programming Dojo was organized by Christophe Demarey on Dec 1st.

- A hands-on course about Pharo for the students at Lille in November organized by Léo Perard and Stéphane Ducasse.

- Demo for industry at the Rencontres Inria-Industrie *Technologies du Web*, 26 Nov 2014 at EuraTechnologies - Lille.

- RMOD co-organized and participated at ESUG 2014.

- Multiple public Pharo Sprints in Lille.

- Stefan Marr gave a half-day tutorial on "Building Self-Optimizing Interpreters with Truffle or RPython" at the Software Composition Group, Universität Bern, Switzerland, December 2nd, 2014

- Stefan Marr gave an invited talk on "Building High-Performance Language Implementations with Low Effort" at Software Composition Group, Universität Bern, Switzerland, December 1st, 2014

- Stefan Marr gave an invited talk on "Zero-Overhead Metaprogramming: Using Self-Optimizing Interpreters to Remove the Runtime Cost of Reflective Programming" at the Software Languages Lab, Vrije Universiteit Brussel, Belgium, November 2014

- Stefan Marr gave an invited talk "On the Way to Concurrency without Accidental Complexity" at the Institut für Systemsoftware, JKU University Linz, Austria, July 2014

- Stefan Marr gave an invited talk on "Building VMs for Language Designers" at the Software Development Team of Laurence Tratt, King's College London, May 2014

- Stefan Marr gave a talk on "How to get a JIT Compiler for Free?" in the Smalltalk Developer Room of the FOSDEM Open Source Conference, Brussels, Belgium, February 2014

<p style="text-align:center;color:red;">**TACOMA Team**</p>

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events selection

8.1.1.1. member of the conference program committee

- PC member for Ehpwas 2014: 2nd IEEE Int. Workshop on E-Health , 2014, F. Weis
- Member of the scientific committee of MC 2014 (Materiality in its contemporary form) Grenoble, February 2014, M. Dominici

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

L2/L3: network computing (lectures, tutorials, labs), 250 hours, F. Weis, University Rennes 1

Master : Ambient Computing and Mobile Communications, F. Weis, 6 hours, M2, university of Rennes 1

Master : Wireless LANs, F. Weis, 8 hours, M2, Telecom Bretagne

Master: Mobile and Pervasive Computing , P. Couderc, M2, University of Rennes 1

8.2.2. Supervision

PhD: Arnab Sinha, Pervasive control systems for smart waste management solutions, 14/12/10, M. Banâtre and P. Couderc, defended in April 2014

PhD in progress: Francisco Javier Acosta Padilla, Auto-adaptation for IoT, 31/01/13, Frédéric Weis and Johann Bourcier

8.2.3. Juries

Paul Couderc was in the following PhD examination committees:

Arnab Sinha, Pervasive control systems for smart waste management solutions, University Rennes 1 (co-director)

Tony Ducrocq, Auto-organisation des réseaux sans-fil multi-sauts dans les villes intelligentes, University Lille 1 (examiner)

Frédéric Weis was in the following PhD examination committees:

Ozan Gunalp, Déploiement continu des applications pervasives en milieux dynamiques, University Grenoble (PhD referee)

8.2.4. Internship

Master 1 Internship, 3 months: "Enhancing a Web Administration GUI for Smart Home using the Wisdom Framework", CHAABI Abdelhak

Master 1 Internship, 3 months: "Integration of Netatmo, Philipps Hue and Fibaro sensors into a Smart-Home platform", Bahram Salim

Master 1 Internship, 4 months: "Implementation of motion control for an RFID experimentation testbed", Victor Petit

<h1 style="color:red; text-align:center">COATI Project-Team</h1>

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. General chair, scientific chair

Jean-Claude Bermond :

Mediterranean Days 2014, March 12-14 (http://campus.sophiatech.fr/meddays2014/)

Frédéric Giroire :

ResCom'14 : school of the *pôle ResCom of GDR ASR of CNRS* on "Network Science", Furiani, Corsica, May 12-16, 2014

Workshop "Energy Aware Networks" of the labex UCN@Sophia (http://www.ucnlab.eu/fr/node/66), Sophia Antipolis, October 14, 2014

Nicolas Nisse :

GRASTA'14 : 6th Workshop on GRAph Searching, Theory and Applications [54], Cargèse, Corsica, France, March 31th-April 4th, 2014

9.1.1.2. Member of the organizing committee

Christelle Caillouet :

ResCom'14 : school of the *pôle ResCom of GDR ASR of CNRS* on "Network Science", Furiani, Corsica, May 12-16, 2014

Frédéric Havet :

Bondy is 70 : Paris, France, November 17, 2014;

9.1.2. Scientific events selection

9.1.2.1. Chair of conference program committee

David Coudert :

Co-chair of ResCom'14, school of the *pôle ResCom of GDR ASR of CNRS* on "Network Science", Furiani, Corsica, May 12-16, 2014

9.1.2.2. Member of the conference program committee

David Coudert :

ROADEF'14 : 15ème congrès annuel de la Société française de recherche opérationnelle et d'aide à la décision, Bordeaux, France

ONDM'14 : 18th International Conference on Optical Networking Design and Modeling, Stockholm, Sweden, May 19-22, 2014

IEEE ICC'14 : IEEE International Conference on Communications, Sydney, Australia, June 10-14, 2014

IEEE Globecom'14 : IEEE Global Communications Conference, Austin, TX, USA, December 8-12, 2014

Frédéric Havet :

WG'14 : 40th International Workshop on Graph-Theoretic Concepts in Computer Science, Orléans, France, June 25-27, 2014;

ICGT'14 : 9th International Colloquium on Graph Theory and combinatorics, Grenoble, France, June 30-July 4, 2014;

BGW'14 : Bordeaux Graph Workshop, Bordeaux, France, November 19-22 2014;

Nicolas Nisse :

16es Rencontres Francophones sur les Aspects Algorithmiques des Télécommunications (AlgoTel 2014), Ile de Ré, France, 3-6 June, 2014.

9.1.3. Journal

9.1.3.1. Member of the editorial board

Jean-Claude Bermond :

Combinatorics Probability and Computing

Computer Science Reviews

Discrete Applied Mathematics

Discrete Mathematics

Discrete Mathematics, Algorithms and Applications

Journal of Graph Theory

Journal of Interconnection Networks (Advisory Board)

Mathématiques et Sciences Humaines

Networks (Wiley)

Parallel Processing Letters

SIAM book series on Discrete Mathematics, Transactions on Network Optimization and Control, Discrete Mathematics, Algorithms and Applications

David Coudert :

Discrete Applied Mathematics (Elsevier)

Networks (Wiley)

Frédéric Havet :

Discrete Mathematics and Theoretical Computer Science

9.1.4. Steering committees

David Coudert :

Pôle ResCom du GDR ASR du CNRS (since 2005)

Rencontres francophones sur les aspects algorithmiques des télécommunications (AlgoTel)

Frédéric Havet :

GT Graphes du GDR IM du CNRS

Ecole de Printemps de Théorie des Graphes

Journée Combinatoire et Algorithmes du Littoral Méditerranéen

9.1.5. Participation in conferences

ICDCN : 15th International Conference on Distributed Computing and Networks, January 4-7 2014, Coimbatore, India. Attended by Nicolas Nisse.

ROADEF : 15ème congrès annuel de la Société française de recherche opérationnelle et d'aide à la décision, Bordeaux, France, February 26-28. Attended by David Coudert and Alvinice Kodjo (speaker);

STACS : 31st Symposium on Theoretical Aspects of Computer Science, March 5-8 2014, Lyon, France. Attended by Nicolas Nisse.

GRASTA : 6th Workshop on GRAph Searching, Theory and Applications, March 31th-April 4th, 2014, Cargèse, Corsica, France. Attended by David Coudert (speaker), Nicolas Nisse (speaker and organiser), and Stéphane Pérennes.

Nice Workshop on Random Graphs : May 14-15, 2014, Nice, France. Attended by Nicolas Nisse.

ResCom : school of the *pôle ResCom of GDR ASR of CNRS* on "Network Science", Furiani, Corsica, May 12-16, 2014. Attended by David Coudert (Lecturer)

AlgoTel : 16es Rencontres Francophones sur les Aspects Algorithmiques des Télécommunications (AlgoTel 2014), 3-6 June, 2014, Ile de Ré, France. Attended by Fatima Zahra Moataz (speaker), David Coudert, Nicolas Nisse, T. K. Phan (speaker);

WG : 40th International Workshop on Graph-Theoretic Concepts in Computer Science, Orléans, France (June 25-27, 2014). Attended by Frédéric Havet;

SEA : Symposium on Experimental Algorithms, Copenhagen, Denmark, June 29 - July 1st, 2014. Attended by David Coudert (speaker).

ICGT : 9th International colloquium on graph theory and combinatorics, June 30-July 4, 2014, Grenoble, France. Attended by Frédéric Havet and Nicolas Nisse.

MAC : Moving and Computing. Research Meeting on Distributed Computing by Mobile Robots, July 26th 2014, Hida Takayama, Japan. Attended by Nicolas Nisse.

IWOCA : 25th International Workshop on Combinatorial Algorithms, Duluth, Minnesota, USA (October 15-17, 2014). Attended by Benjamin Momège (speaker);

BGW : Bordeaux Graph Workshop, Bordeaux, France, November 19-22 2014. Attended by Frédéric Havet;

Globecom : IEEE Global Communications Conference, Austin, United States (December 8-12, 2014). Attended by Frédéric Giroire (speaker)

9.1.6. Participation in scientific meetings

STINT : Kick off meeting of ANR STINT, Lyon, February 17-18, 2014. Attended by Jean-Claude Bermond, Frédéric Havet and Stéphane Pérennes;

FIA : Future Internet Assembly, Athens, Greece, March 18-20, 2014. Attended by David Coudert;

EULER : Plenary meeting of FP7 STREP EULER, Paris, France (March 27-28, 2014). Attended by David Coudert;

JSInria : Journées Scientifiques Inria, Lille, France, June 25-27, 2014. Attended by David Coudert (speaker);

EULER : Final review meeting of FP7 STREP EULER project, Brussels, Belgium (August 29, 2014). Attended by David Coudert;

STINT : workshop of ANR STINT, Vercors, France, September 24-26 2014. Attended by Frédéric Havet

Seminar Orange/Inria : Common seminar Orange/Inria, Paris, France, October 28, 2014 Attended by Joanna Moulierac;

Inria-Industrie : Rencontre Inria Industrie "Télécoms du futur", November, 13 2014. Attended by Joanna Moulierac.

9.1.7. Participation in committees

Jean-Claude Bermond :

Expert for DRTT, and various projects outside France (Canada, italie, ...)

David Coudert :

Expert for the Future and Emerging Technologies Open Scheme (FET-Open) European program, and the ANR

Frédéric Giroire :

Elected member of I3S laboratory committee since 2012

Frédéric Havet :

Responsible of Pôle ComRed of I3S laboratory;

Expert for the ANR and its Czech analogues;

Nicolas Nisse :

Expert for the ANR

Michel Syska :

Expert for DRTT PACA

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence

Alvinice Kodjo, *Informatique Pratique*, 40h ETD, Level L1, UNS;

Alvinice Kodjo, *Réseaux (Couches supérieures)*, 15h ETD, Level L3, UNS;

Fatima Zahra Moataz, *Programmation avec Python*, 12h ETD, Level L1, Université Nice-Sophia Antipolis;

Fatima Zahra Moataz, *Systèmes Informatiques*, 24h ETD, Level L1, Université Nice-Sophia Antipolis;

Christelle Molle-Caillouet, *IT Tools*, 53h ETD, Level L1, IUT Nice Côte d'Azur, UNS;

Christelle Molle-Caillouet, *Database and advanced information system*, 36h ETD, Level L2, IUT Nice Côte d'Azur, UNS;

Christelle Molle-Caillouet, *Operations Research*, 81h ETD, Level L2, IUT Nice Côte d'Azur, UNS;

Christelle Molle-Caillouet, *Delivery Optimization*, 30h ETD, Level L3, IUT Nice Côte d'Azur, UNS;

Benjamin Momège, *Mathématiques Discrètes*, 75h ETD, Level L3, Polytech'Nice Sophia, UNS;

Joanna Moulierac, *Algorithms and Programming*, 100h ETD, Level L1, IUT Nice Côte d'Azur, UNS;

Joanna Moulierac, *Networks, basics and Advanced Networks*, 150h ETD, Level L1 and L2, IUT Nice Côte d'Azur, UNS;

Michel Syska, *Introduction to Operating Systems*, 40h ETD, Level L1, IUT Nice Côte d'Azur, UNS;

Michel Syska, *Operating Systems : Advanced Programming*, 60h ETD, Level L1, IUT Nice Côte d'Azur, UNS;

Michel Syska, *Bash Scripting*, 40h ETD, Level L2, IUT Nice Côte d'Azur, UNS;

Michel Syska, *Introduction to Algorithms*, 30h ETD, Level L3, IUT Nice Côte d'Azur, UNS;

Michel Syska, *Linux Systems Administration*, 40h ETD, Level L3, IUT Nice Côte d'Azur, UNS;

Master

David Coudert, *Algorithms for Telecoms*, 32h ETD, stream UbiNet of Master 2 IFI and Master RIF, UNS;

Frédéric Giroire, *Algorithmics of Telecommunications*, 18h ETD, stream UbiNet of Master 2 IFI and Master RIF, UNS;

Frédéric Giroire, *Green Networks*, 15h ETD, stream UbiNet of Master 2 IFI, UNS;

Frédéric Giroire, *Introduction to probability and statistics*, 15h ETD, International Master 1, UNS;

Frédéric Havet, *Optimisation combinatoire*, 24 ETD, Master 1 and 2, UNS, France;

School

David Coudert, *the notion of hyperbolicity in graphs*, 2h ETD, Summer school ResCom;

9.2.2. Teaching administration

Collaboration Inria-Lycée International de Valbonne

Nicolas Nisse : co-responsible of the Computer Science course of MPSI;

IUT Nice Côte d'Azur

Joanna Moulierac, Directrice d'études of Semestre 2 décalé at IUT Nice Côte d'Azur, Computer Science Department since september 2013;

Michel Syska, responsible of the Computer Science Department of IUT form September 2011 till September 2014. He has organized the national meeting of the 46 CS departements, Nice, October 16-17.

Stream Ubinet, Master 2 IFI (http://ubinet.unice.fr)

Jean-Claude Bermond, member of the scientific committee;

Frédéric Giroire, responsible of the Internships, since October 2011;

International Master 1 (http://computerscience.unice.fr/master1)

Jean-Claude Bermond, member of the scientific committee of the international track of the M1

9.2.3. Supervision

9.2.3.1. HdR

Nicolas Nisse, "Algorithmic complexity: Between Structure and Knowledge How Pursuit-evasion Games help" [17], Université Nice Sophia Antipolis, May 23, 2014

9.2.3.2. PhD

Alvinice Kodjo, "Design and Optimization of Wireless Backhaul Networks" [13], Université Nice Sophia Antipolis, December 18, 2014. Supervisor: David Coudert

Aurélien Lancin, "Étude de réseaux complexes et de leurs propriétés pour l'optimisation de modèles de routage" [14], Université Nice Sophia Antipolis, December 9, 2014. Supervisor: David Coudert

Bi Li, "Tree Decompositions and Routing Problems" [15], Université Nice Sophia Antipolis, November 12, 2014. Supervisors: David Coudert and Nicolas Nisse Computer Science, date de soutenance, encadrant(s)

Ana Karolinna Maia De Oliveira, "Subdivisions of Digraphs" [16], Université Nice Sophia Antipolis, November 5, 2014. Supervisor: Frédéric Havet

Truong Khoa Phan, "Design and Management of Networks with Low Power Consumption" [18], Université Nice Sophia Antipolis, September 25, 2014. Supervisors: David Coudert and Joanna Moulierac

9.2.3.3. PhD in progress

Guillaume Ducoffe, "Metric properties of large graphs", since September 2014. Supervisor: David Coudert

Nicolas Huin, "Energy-Efficient Software Defined Networks", since October 2014. Supervisor: Frédéric Giroire and Dino Lopez (I3S)

Fatima Zahra Moataz, "Design and optimization of networks subject to failure and link capacity variations", since October 2012. Supervisor: David Coudert

Sebastien Felix, "Smart transports : optimisation du trafic dans les villes", since January 2011. Supervisors: Jean-Claude Bermond and Jérôme Galtier

9.2.3.4. Internship

Paul Bertot (IUT Nice Côte d'Azur, France), "distributed computing of the diameter of large graphs", November-February (3 months). Supervisor: Michel Syska;

Eneina Gjata (Master 2 IFI, parcours ubinet, University Nice-Sophia Antipolis, France), "Analysis of protocols for Data Redundancy Elimination", March-August 2014 (6 months). Supervisor: Joanna Moulierac

Nicolas Huin (Master 2 RIF, University Nice-Sophia Antipolis, France), "Study of a Distributed Live Video Streaming System", March-August 2014 (6 months). Supervisor: Frédéric Giroire

Flavian Jacquot (IUT Nice Côte d'Azur, France), "distributed computing frameworks for large graphs", November-March (4 months). Supervisor: Luc Hogie;

William Lochet (ENS, Lyon, France), pre-doctoral internship on "Subdivision of oriented cycles in digraphs", October-December 2014 (3 months). Supervisor: Frédéric Havet

Alexandros Panagiotidis (International Master 1, University Nice-Sophia Antipolis, France), "Connectivity Inference in Structural Proteomics", May-August 2014 (4 months). Supervisors: David Coudert, Christelle Caillouet

Thomas Wattrelot (Master 1 MAM, Polytech'Nice, UNS), "Comparison of algorithms for the traveling salesman problem", July-August 2014 (2 months). Supervisor: David Coudert

9.2.4. Juries

David Coudert :

Member of the HdR jury of Nicolas Nisse, Univ. Nice Sophia Antipolis, May 23, 2014

Member of the PhD jury of François Clad, Univ. Strasbourg, September 22, 2014

Member of the PhD jury of Truong Khoa Phan, Univ. Nice Sophia Antipolis, September 25, 2014

Member of the PhD jury of Bi Li, Univ. Nice Sophia Antipolis, November 12th, 2014

Referee and member of the PhD jury of Massinissa Merabet, Univ. Montpellier, December 5, 2014

Member of the PhD jury of Aurélien Lancin, Univ. Nice Sophia Antipolis, December 9, 2014

Referee and member of the PhD jury of Stéphane Raux, Univ. Paris Diderot, December 12, 2014

Member of the PhD jury of Alvinice Kodjo, Univ. Nice Sophia Antipolis, December 18, 2014

Frédéric Giroire :

Member of the PhD jury of Alain Julé, Université de Cergy-Pontoise, March 7, 2014

Frédéric Havet :

Referee and member of the PhD jury of Julien Bensmail, University of Bordeaux, June 10, 2014

Referee and member of the PhD jury of Remi Watrigant, University Montpellier 2, October 2, 2014

Member of the PhD jury of Ana Karolinna Maia De Oliveira, Univ. Nice Sophia Antipolis, November 5, 2014

Referee and member of the PhD jury of Maxime Cochefert, University of Metz, December 18, 2014

Joanna Moulierac :

Member of the PhD jury of Truong Khoa Phan, Univ. Nice Sophia Antipolis, September 25, 2014

Nicolas Nisse :

Member of the PhD jury of Bi Li, Univ. Nice Sophia Antipolis, November 12, 2014

9.2.5. Participation in committees

Jean-Claude Bermond :

Member of the Ph.D. committee of the University of Marseille

Responsible of the Attractivity for Inria Sophia Antipolis - Méditerranée and more generally for the Campus Sophia Tech

David Coudert :

Member of doctoral committee (CSD) of Inria Sophia Antipolis - Méditerranée, since 2009

Nicolas Nisse :

Member of a comité de sélection of 27me section, Univ. Aix-Marseille

Frédéric Havet :

President of a *comité de sélection* of 27eme section of UNS;

Member of a *comité de sélection* of 27eme section of Aix-Marseille Université;

Joanna Moulierac

Member of the *comité de sélection 27e section* of Univ. Nice Sophia Antipolis

9.3. Popularization

- Fête de la Science

    Frédéric Giroire presented the stand "Mathémagie" (Magie et Mathématiques) at Rians, France, October 13-18, 2014;

    Frédéric Havet organized the "Village des Sciences de Rians", October 13-18 (900 attendants) and created several stands and trained some people to conduct them;

    Frédéric Havet presented the stand "Pavages: art, preuves et jeux" at Rians, France, October 13-18, 2014.

- Institut Esope - Maison des Sciences de Rians

    Frédéric Havet is vice-president of the association Esope 21 whose aim is scientific and literary popularization. He organized many local events and conducted various discovery workshops in elementary and secondary schools. In total , in spoke in front of about 30 classes on various topics (Mathematics, Computer Science, Astronomy, Ornithology, Job in research, etc.).

DANTE Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. General chair, scientific chair

- Márton Karsai was organiser of the Computational Social Science, ECCS 2014 satellite.

9.1.2. Scientific events selection

9.1.2.1. Chair of conference program committee

- Paulo Gonçalves is officer of the local liaison board of EURASIP
- Anthony Busson was TPC (Technical Program Chair) of ISNCC 2014
- Isabelle Guérin Lassous was Program co-Chair of ACM International Symposium on Performance Evaluation of Wireless Ad Hoc, Sensor, and Ubiquitous Networks (PE-WASUN 2014)

9.1.2.2. Member of the conference program committee

- Paulo Gonçalves is PC member of IWCMC - TRAC 2014.
- Christophe Crespelle is PC member of AlgoTel 2014
- Éric Fleury is PC member of Networking 2014
- Éric Fleury is PC member of NetSciCom 2014
- Isabelle Guérin Lassous is PC member of MSWiM 2014, IPDPS 2014, ICC 2014, Globecom 2014 and MedHocNet 2014.
- Márton Karsai is PC member of CSS ECCS'14

9.1.2.3. Invited talks

- Márton Karsai was invited lecturer at RESCOM Summer School - (May 2014, Furiani, Corsica, France)
- Márton Karsai was invited speaker at TNetSphys'14 - NetSci'14 Symposium (June 2014, University of California, Berkeley, CA, USA)
- Márton Karsai was invited speaker at Complex Networks and Dynamics - ICCSA'14 Satellite meeting (June 2014, Le Havre, France)
- Márton Karsai was invited speaker at Institute of Research and Development (October 2014, Bondy, Paris, France)
- Paulo Gonçalves was invited keynote speaker at the international conference CLOSER 2014.

9.1.3. Journal

9.1.3.1. Member of the editorial board

- Isabelle Guérin Lassous is a member of the editorial board of: Computer Communications (Elsevier), Ad Hoc Networks (Elsevier) and Discrete Mathematics & Theoretical Computer Science.

9.1.3.2. Reviewer

- Márton Karsai was acting as reviewer in Physical Review X, EPJ Data Science, New Journal of Physics, PLoS ONE, Transactions on Network Science and Engineering, Nature Scientific Reports, Physica Scripta, Network Science, Europhysics Letters
- P. Gonçalves was reviewer for *IEEE Signal Processing* (transactions on, letters), *EURASIP J. on Advances in Signal Processing*.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

9.2.1.1. Teaching by Éric Fleury

Éric Fleury is Professor at the Computer Science department of ENS de Lyon and holds a Inria chair.

Master : CR15 - Complex Networks, 18H, M2, ENS de Lyon, France

Licence/Master : Alter-disciplinary course, Complexe network: an interdisciplinary approche 6H, L3, M1, M2, ENS de Lyon, France

9.2.1.2. Teaching by Thomas Begin

Licence : "Networks", 18h, Bachelor (L3), University Lyon 1, France

Master : "Networking", 63h, Master (M1), University Lyon 1, France

Master : "Advanced Networks", 50h, Master (M2), University Lyon 1, France

Master : "Computer Networks", 12h, Master (M1), ENS de Lyon, France

9.2.1.3. Teaching by Christophe Crespelle

Master : "Introduction to Graph Algorithms", 21h, Master (1st year), Institute of Mathematics Hanoi, Vietnam

Licence : "Combinatorial Optimization", 12h, Bachelor (4th year), Vietnam National University of Hanoi, Vietnam

Master : "Introduction to Graph Algorithms", 30h, Master (1st year), Institute of Mathematics Hanoi, Vietnam

9.2.1.4. Teaching by Isabelle Guérin Lassous

Professor at Université Claude Bernard Lyon 1 in the Computer Science since 2006. She lectures at the University.

Master : "Networking", 20h, Master (M1), University Lyon 1, France

Master : "QoS and Multimedia Networks", 30h, Master (M2), University Lyon 1, France

Master : "Wireless Networks", 15h, Master (M2), University Lyon 1, France

Master : "Introduction to Networking", 30h, Master (M2), University Lyon 1, France

9.2.1.5. Teaching by Márton Karsai

Márton Karsai is an Assistant Professor at ENS Lyon in the Computer Science Department since 2013 and holds a Inria Chair. He is the co-responsible for the Complex Networks Master 2 program. His lectures in 2014:

Master : CR15 - Complex Networks, 18H, M2, ENS de Lyon, France

Master : Dynamical Processes on Networks, 4H, M2, ENS de Lyon, France

Master : Modelling Social Systems, 6H, M2, ENS de Lyon, France

Licence/Master : Alter-disciplinary course, Complexe network: an interdisciplinary approach 4H, L3, M1, M2, ENS de Lyon,

9.2.1.6. Teaching by Paulo Gonçalves

Postgraduate level: Course (theory and practice) on Signal Processing (80 hours Eq. TD), CPE Lyon, France.

9.2.2. Supervision

9.2.2.1. Defended

Shubhabrata Roy, A Complete Framework for Modelling Workload Volatility of a VoD System: a Perspective to Probabilistic Management, Université de Lyon, June 2014, P. Gonçalves and T. Begin

9.2.2.2. In Progress

- Thiago Abreu, Modeling and performance analysis of IEEE 802.11-based chain networks, Université de Lyon, defense scheduled on Mars 2015, I. Guérin-Lassous and T. Begin

- Lucie Martinet, Dynamic contact networks and diffusion process, Oct 2011, E. Fleury and C. Crespelle

- Benjamin Girault, Signal processing on graph, Oct 2012, E. Fleury and P. Gonçalves

- Matteo Morini, New tools for understanding the dynamics of social networks, Oct 2013, E. Fleury, P. Jensen and M. Karsai

- Yannick Leo, Diffusion process and community structure in complex networks, Oct 2013, E. Fleury, C. Crespelle, and M. Karsai

- Huu Nghi Nguyen, Admission control and controllers allocation for SDN networks, Sept 2014, I. Guérin Lassous, A. Busson and T. Begin

- Mohammed Amer, Optimisation and planning of Wi-Fi based networks: SDN paradigm, Nov 2014, I. Guérin Lassous, A. Busson

- Elie Rotenberg, An approach for a reliable estimation of the properties of the Internet topology, September 2010, Matthieu Latapy and Christophe Crespelle

- Laurent Reynaud, Optimized mobility strategies for interference tolerance and energie saving in wireless networks, Oct 2013, . Guérin Lassous

9.2.3. Juries

Eric Fleury   was member of the PhD examination board of: Nicolas Tremblay, Daniel Bernades.

Eric Fleury   was member of the HdR examination board of: Michael Hauspie, Pierre Borgnat.

Anthony Busson   was reviewer and member of the PhD examination board of: Sebastien Faye, Salim Allal.

Christophe Crespelle   was member of the PhD examination board of Pham Van Trung, Vietnam Academy of Science and Technology.

Isabelle Guérin Lassous   was member of the PhD examination board of: Jordan Augé (reviewer)

Isabelle Guérin Lassous   was member of the HdR examination board of: Nadjib Achir (reviewer), Hervé Rivano, Tara Ali Yahiya (reviewer), Marco Fiore.

Paulo Gonçalves   was reviewer and member of the PhD examination board of Sergey Kirgizov.

9.3. Popularization

- Interview of E. Fleury for X:ENIUS on arte TV: *Big data : opportunity or curse ?* (http://www.arte.tv/guide/fr/051094-020/x-enius)

- Interview of M. Karsai for Campus Channel TV: *Master 2 program of Complex Networks* (https://www.youtube.com/watch?v=k7I1m1NCbTU)

9.4. Institutional commitment

- Éric Fleury is Vice-Chairman of the Inria Grenoble Rhône Alpes projects committee
- Éric Fleury is member of the Inria Evaluation Committee and member of the board.
- Éric Fleury is member of the junior research position (CR2) jury at Inria Sophia
- Éric Fleury is member of the research (CR1) jury at Inria Sophia
- Éric Fleury is member of the Starting Research Position and Advanced Research position jury
- Paulo Gonçalves is scientific correspondent of the International Relations for Inria Grenoble - Rhône-Alpes
- Paulo Gonçalves is member of the *Comité de Développement Technologique* of Inria Grenoble - Rhône-Alpes
- Isabelle Guérin Lassous is member of the researcher support commission of the Inria Grenoble Rhône Alpes

9.5. Collective Responsibilities outside Inria

- Éric 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.
- Éric Fleury is in the in the Executive Committee of the IXXI – Rhône-Alpes Complex Systems Institute.
- Éric Fleury has been an expert for the Fund for Scientific Research - FNRS.
- Paulo Gonçalves is scientific correspondent of the International Relations for the Computer Science Department at ENS Lyon.
- Isabelle Guérin Lassous is member of the CNRS National Committee for section 06 (Computer Science).
- Isabelle Guérin Lassous was the chair of the AERES expert committee of CALMIP.
- Christophe Crespelle is member of the Council of the LIP laboratory.
- Christophe Crespelle is member of the steering committee of the IXXI – Rhône-Alpes Complex Systems Institute.
- Christophe Crespelle was expert for Nafosted (National funding agency for research in Vietnam) in Computer Science in 2014.
- Thomas Begin is an elected member of the Council of the LIP laboratory.
- Thomas Begin is an elected member of the Advisory Committee for the department Computer Science for University Lyon 1.
- Márton Karsai is the co-responsible of the Complex Networks Master 2 program at ENS Lyon.

DIANA Team

8. Dissemination

8.1. Promoting Scientific Activities

Walid Dabbous is member of the ns-3 consortium. He co-organizes the ns-3 workshop in May 2015. He is member of the scientific council of the Inria Bell-Labs laboratory on Communication networks of the future.

Thierry Turletti, Senior ACM and IEEE member, served in 2014 in the program committees of the following international workshops: 1st ACM Workshop on Wireless and Mobile Technologies for Smart Cities (WiMobCity) at MobiHoc, the 2nd Workshop on Emulation Tools, Methodology and Techniques at SIMU-Tools, the 5th Workshop on ns-3 and the 5th ICCE, Special Session on Software Defined Networking. He co-chaired the 1st Workshop on Software-Defined Internets of the future (WSDIF'14), Philadelphia, Pennsylvania on October 28 2014. 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 is on the editorial board of the Computer Networks journal, on the Technical Program Committee for the Traffic Monitoring and Analysis (TMA) 2015 workshop and Publicity Co-Chair for ACM SIGCOMM 2015. 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).

Arnaud Legout on the editorial board of the Computer Networks journal, and was PC member of the ACM/Usenix IMC'2014 conference. Arnaud Legout is the president of the Commission of the users of IT resources of Sophia Antipolis Inria research center.

Damien Saucez is member of the TPC of CCNC 2015, BMSGS' 2015, and AINA-2015. Damien Saucez is secretary and document shepherding at the IETF LISP working group (details about the secretary and shepherd roles can be found in RFC 2418 and RFC 4858). Damien Saucez is secretary of the Project Committee (CP) at Inria Sophia Antipolis Méditerranée.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Master Ubinet: Chadi Barakat and Walid Dabbous, Evolving Internet, 31.5 hours, M2, université, University of Nice-Sophia Antipolis, France.

Master Ubinet: Chadi Barakat and Walid Dabbous, Internet Measurements and New Architectures, 31.5 hours, M2, University of Nice-Sophia Antipolis, France.

Master 1 International: Chadi Barakat, Algorithms for Networking, 27 hours, M1, University of Nice-Sophia Antipolis, France.

Master CAR: Chadi Barakat, Information Centric Networking, 4.5 hours, Telecom Paris Tech, France.

Master Estel: Chadi Barakat, Voice over IP, 9 hours, University of Nice-Sophia Antipolis, France.

Master RISM: Chadi Barakat, Mobility and wireless networking, 10.5 hours, University of Avignon, France.

Master Ubinet: Arnaud Legout, From BitTorrent to Privacy, 36 hours, M2, University of Nice-Sophia Antipolis, France.

Master 1 International: Arnaud Legout, Scientific Communication, 22.5 hours, M1, University of Nice-Sophia Antipolis, France.

Master IUP GMI: Damien Saucez, Security and privacy in networks, 38h, M2, University of Avignon, France.

IUT : Damien Saucez, Advanced Network Services and Operator Network Technologies, 27h, L1 and L2, University of Nice-Sophia Antipolis, France.

E-learning

Mooc: Arnaud Legout and Thierry Parmentelat, Python : des fondamentaux à l'utilisation du langage, 7 weeks, FUN (https://www.france-universite-numerique-mooc.fr/), Inria, 9166 registered persons (for elementary school to PhD), 500 finished the course, 100 did the miniproject.

8.2.2. Supervision

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: Luigi Vigneri works on "Vehicles as a Mobile Cloud: Leveraging mobility for content storage and dissemination" since April 2014. His thesis is co-supervised by Chadi Barakat.

PhD in progress: Maksym Gabielkov works on "Information propagation in social networks" since October 2012. His thesis is supervised by Arnaud Legout.

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: 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: Hardik Soni works Software Defined Networking in challenged environments since September 2014. His thesis is co-supervised by Thierry Turletti and Walid Dabbous.

8.2.3. Juries

Walid Dabbous served as jury member of Vincent Roca HDR thesis, "Codes AL-FEC et protocoles de diffusion robustes de contenus" defended in June 2014 at University of Grenoble.

Chadi Barakat served as president and jury member of Rachad Maallawi PhD thesis, "Mechanisms, Protocols, and Architectures for the Offloading control in the heterogeneous networks context" defended in January 2014 at Orange Labs Issy-les-Moulineaux.

Walid Dabbous served as reviewer of Wei You PhD thesis, "A Content-Centric Networking Node for Realistic Efficient Implementation and Deployment" defended in January 2014 at Telecom Bretagne, Lannion.

Chadi Barakat served as jury member of Wissam Chahin PhD thesis, "Réseaux hétérogènes tolérants aux délais" defended in March 2014 at IUP Avignon.

Walid Dabbous served as reviewer of Nada Sbihi PhD thesis, "Gestion du trafic dans les réseaux orientés contenus" defended in March 2014 at UPMC, Paris.

Walid Dabbous served as jury member of Tien-Thinh Nguyen PhD thesis, "Optimization of Mobility Mechanisms for IP based Multicast Flows" defended in May 2014 at Eurecom, Sophia Antipolis.

Walid Dabbous served as reviewer of Alexandru-Florin Tatar PhD thesis, "Predicting user-centric behavior: Content popularity and mobility" defended in July 2014 at UPMC, Paris.

Arnaud Legout served as reviewer of Arnaud Jégou PhD thesis, "Harnessing the power of implicit and explicit social networks through decentralization" defended in 2014 at University of Rennes.

Walid Dabbous served as jury member of Mahmoud El Chamie PhD thesis, "Optimization, Control, and Game Theoretical Problems in Consensus Protocols" defended in October 2014 at University of Nice Sophia Antipolis.

Thierry Turletti served as reviewer of Rosa Vilardi PhD thesis, "Traffic Monitoring and Measurements in modern Networks", defended in January 2014 at Politecnico di Bari.

Thierry Turletti served as reviewer of Shubhabrata Roy PhD thesis, "A Complete Framework for Modelling Workload Volatility of a VoD System: a Perspective to Probabilistic Management", defended in May 2014 at ENSL.

Thierry Turletti served as examiner of Rui Pedro Ferreira da Costa PhD thesis, "Mobility Architecture for Next Generation Networks", defended in May 2014 at Eurecom.

Thierry Turletti served as reviewer of Tara Ali Yahiya HDR thesis, "Allocation des Ressources et Gestion d'Interférences dans les Réseaux 4G", defended in May 2014 at Université de Paris Sud.

Thierry Turletti served as examiner of Siwar en Hadj Said PhD thesis, "Contextual Connectivity in Multi-Access Architectures", defended in December 2014 at Télécom Bretagne.

8.3. Popularization

Walid Dabbous presented Future Internet challenges to high school students at Lycée de Valabre Gardanne in April 2014 and at CIV in October at CIV for the Science Week (Fête de la science).

Walid Dabbous made a presentation on Software Defined Networking and Network Functions Virtualization at the Inria Industry Day in Paris on the theme "Télécoms du futur".

Chadi Barakat presented ACQUA at the Inria Industry Day in Paris on the theme "Télécoms du futur". See http://www.inria.fr/en/centre/paris-rocquencourt/innovation/rii-telecoms-du-futur/program.

DIONYSOS Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. Member of the organizing committee

Pierre L'Ecuyer was a member of the following groups:

- Steering Committee for the IMACS Seminar on Monte Carlo Methods (biennial conference), since 2009.
- Steering Committee for the International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing, since 2006.
- Selection committee for the INFORMS Simulation Society Distinguished Service Award, 2012-2015.

G. Rubino and B. Tuffin are members of the Steering Committee of the International Workshop on Rare Event Simulation (RESIM).

8.1.2. Scientific events selection

8.1.2.1. Chair of conference program committee

- Bruno Sericola served as Program Chair of ASMTA 2014, 21th International Conference on Analytical and Stochastic Modelling Techniques and Applications, Budapest, Hungary, July 2014.
- Adlen Ksentini served as Technical Program Committee Chair of the 3rd IEEE Workshop on Telecommunication Standards: From Research to Standards, hold in conjunction with IEEE Globecom 2014.

8.1.2.2. Member of the conference program committee

Bruno Sericola served in the Program Committee of the following conferences:

- MACOM 2014, 7th International Workshop on Multiple Access Communications, Halmstad, Sweden, 27-28 August 2014.
- ACCESS 2014, 5th International Conference on Access Networks, Seville, Spain, 22-26 June 2014.

Pierre L'Ecuyer was a member of the program committee of the following events:

- SIMULTECH'2014: International Conference on Simulation and Modeling Methodologies, Technologies and Applications, Vienna, Austria, Aug. 2014.
- MCQMC'2014: Eleventh International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing, Leuven, Belgium, April 2014.
- ICORES'2014: International Conference on Operations Research and Enterprise Systems, Angers, France, March 2014.

Adlen Ksentini was a member of the program committee of the following events:

- IEEE ICC 2014 Adhoc and Sensors and Wireless Networks Symposium, Sydney, Australia 2014.
- IEEE Globecom 2014 Adhoc and Sensors Symposium, Austin, USA 2014.
- IEEE WCNC 2014, Istanbul, Turkey 2014.

Yassine Hadjadj-Aoul was a member of the program committee of the following events:

- IEEE ICC 2014, Adhoc and Sensor Networking Symposium, Sydney, Australia 2014.
- IEEE Globecom 2014, Wireless networking Symposium, Austin, USA 2014.
- IEEE WCNC 2014, Mobile and Wireless Networks track, Istanbul, Turkey 2014.
- IEEE ICNC 2014, Wireless Ad hoc and sensor networks symposium, Honolulu, Hawaii, USA

Bruno Tuffin was a member of the program committee of the following events:

- 3rd Workshop on Smart Data Pricing (SDP 2014), Workshop of IEEE INFOCOM 2014, Toronto, Canada, May 2, 2014.
- 2014 ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (ACM SIGSIM PADS 2014), Denver, Colorado, USA, May 18-21, 2014.
- RAWNET/WNC3 2014 - 10th International Workshop on Resource Allocation, Cooperation and Competition in Wireless Networks, Hammamet, Tunisia, June 2014.
- W-PIN+NetEcon 2014: The joint Workshop on Pricing and Incentives in Networks and Systems, Austin, TX, USA, in conjunction with ACM SIGMETRICS.
- Workshop on QoE-centric Network and Application Management (QoENAM 2014), co-located with the IEEE ICC 2014 conference, Sydney, Australia, June 2014.
- 10eme Atelier de performance, Sophia Antipolis, France, 11-13 Juin 2014.
- 10th International Workshop on Rare Event Simulation (RESIM 2014), August 27-29, 2014, Amsterdam, Netherlands.
- 4th International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH), Vienna, Austria, 2-4 September 2014.

Gerardo Rubino was a member of the program committee of the following events:

- Networking 2014: IFIP Networking 2014 Conference, Trondheim, Norway, Jun 2–4
- Resim 2014: 10th International Workshop on Rare Event Simulation, Amsterdam, Netherlands, Aug 27–29, 2014.
- QEST 2014: 11th International Conference on Quantitative Evaluation of SysTems, Florence, Italy, Sep 8–12, 2014.
- CLEI 2014: XL Conferencia Latinoamericana de Informática (Latin-American Informatics Conference), Montevideo, Uruguay, Sep 15–19, 2014.

8.1.3. *Journal*

8.1.3.1. Member of the editorial board

Adlen Ksentini was guest editor for the Special Issue in IEEE Wireless Communication Magazine on Research & Standards: Leading the Evolution of Telecom Network Architectures.
Bruno Sericola is an associate editor for the following journals:

- Open Operational Research Journal.
- International Journal of Stochastic Analysis.
- IISRN Probability and Statistics.

Bruno Tuffin is an associate editor for the following journals:

- INFORMS Journal on Computing, since 2007.
- Mathematical Methods of Operations Research, since November 2008.
- ACM Transactions on Modeling and Computer Simulation, since July 2009.

Pierre L'Ecuyer is an associate editor for the following journals:

- ACM Transactions on Mathematical Software, since August 2004.
- Statistics and Computing (Springer-Verlag), since June 2003.
- International Transactions in Operational Research, since May 2007.
- Cryptography and Communications - Discrete Structures, Boolean Functions and Sequences (Springer-Verlag), since December 2006.

8.1.3.2. Reviewer

Bruno Tuffin has reviewed papers in 2014 for Operations Research, Telecommunication Systems, IEEE Transaction on Reliability, IEEE/ACM Transaction on Networking, Annals of Telecoms, International Transaction in Operational Research, etc. Bruno Tuffin was also a reviewer in 2014 for the Natural Sciences and Engineering Research Council of Canada (NSERC) and for CIFRE contracts (France).

César Viho has reviewed project proposals for the ANR and for CIFRE contracts for the ANRT. He has reviewed papers for the journals IEEE Transaction on Wireless Communication, IEEE Transactions on Vehicular Communications, IEEE Communications Magazine, and for the following international conferences: IWCNC'14, Globecom'14, ICTSS'14, VTC Fall 2014.

Adlen Ksentini has reviewed papers in 2014 for Transaction Paralel Distributed Systems-TPDS, Transaction on Wireless Communication - TWC, Transaction on Vehicular Technology - TVT, Wireless Communication Magazine, Elsevier Computer Communication.

Yassine Hadjadj-Aoul has reviewed papers in 2014 for Transaction on Vehicular Technology-TVT, Wireless Communication Magazine, Elsevier Computer Communication and for the following international conferences: Globecom'14, ICC'14, WCNC'14.

Gerardo Rubino has reviewed papers for IEEE Wireless Communications Magazine, Neural Computation, Journal of Applied Probability, Networking 2014, XL Latin American Computing Conference (CLEI 2014), Latin American Symposium on Computing and Society, 11th International Conference on Quantitative Evaluation of SysTems (QEST 2014).

8.1.4. Seminar and talks

- W. Chan, G. Koole, and P. L'Ecuyer, "Dynamic Call Routing Policies Using Call Waiting Times and Agent Idle Times", The Optimization Days, Montreal, May 2014.
- N. Chapados and P. L'Ecuyer, "Hierarchical Bayesian State-Space Model for Call Center Arrival Rate Forecasting", The Optimization Days, Montreal, May 2014.
- R. Ibrahim, P. L'Ecuyer, H. Shen, "Service Times in Call Centers: A Data-Based Perspective", INFORMS Annual Meeting, San Francisco, Nov. 2014.
- P. L'Ecuyer, "Challenges in Stochastic Modeling of Service Systems: Illustrations with Call Centers", Rotman School of Management, University of Toronto, Nov. 2014.
- P. L'Ecuyer, Discussion of 2014 Markov Lecture of Peter W. Glynn: "Perspectives on Traffic Modeling", INFORMS Annual Meeting, San Francisco, Nov. 2014.
- P. L'Ecuyer, "Challenges in Stochastic Modeling of Call Centers", Ecole Centrale de Paris, Châtenay-Malabry, France, June 2014.
- P. L'Ecuyer, "Multiple Streams of Random Numbers for Parallel Computers: Design and Implementation", Centre d'Energie Atomique (CEA), Saclay, France, June 2014.
- P. L'Ecuyer, "Challenges in Stochastic Modeling of Service Systems: Illustrations with Call Centers", invited plenary talk, 10th Workshop on Performance Evaluation (AEP 2014), Inria Sophia-Antipolis, France, June 2014.
- P. L'Ecuyer, "On the Distribution of Integration Error with Randomly-Shifted Lattice Rules", invited talk, Latrobe University, Melbourne, Australia, Feb. 2014.

- P. L'Ecuyer, "Static Network Reliability Estimation Under the Marshall-Olkin Copula", School of Mathematics, University of New South Wales, Sydney, Feb. 2014.

- M. Pelleau, L.-M, Rousseau, P. L'Ecuyer, and L. Delorme, "Agent Scheduling from Forecasts of Future Call Arrivals at Hydro-Quebec Call Centers", The Optimization Days, Montreal, May 2014.

- G. Rubino and B. Tuffin. "Introduction to Monte Carlo methods". One-day course/seminar at ALSTOM, France, May 2014.

- N. Stier-Moses, P. L'Ecuyer, P. Maillé, and B. Tuffin, "Revenue-Maximizing Rankings for Online Platforms with Quality-Sensitive Consumers", Yahoo Inc., June 2014.

- T. A. Ta, P. L'Ecuyer, and F. Bastin, "Staffing Optimization with Chance Constraints in Call Centers", The Optimization Days, Montreal, May 2014.

- M. Thiongane and P. L'Ecuyer, "Waiting Time Prediction in Multiskill Call Centers with Callback Options", The Optimization Days, Montreal, May 2014.

- B. Tuffin. "La neutralité du Net." Tr@nspolo: transparence politique et organisationnelle dans les sociétés numériques, Avignon, July 2014.

- B. Tuffin. "Importance Sampling and variance reduction techniques". Summer school on Modeling and Numerical Methods for Uncertainty Quantification (MNMUQ 2014), Porquerolles Island, France, 1-5 September 2014.

- A. Ksentini, "Quand les réseaux mobiles rencontrent le Cloud", au Laboratoire LIF de Marseille, Mars 2014.

- G. Rubino, "Analyzing rare events with Monte Carlo: advanced methods", Center for Uncertainty Quantification, Annual Workshop, Kaust, Saudi-Arabia, January 8, 2014.

- G. Rubino, "New developments around PSQA", at the Applied Science and Technology Research Institute, Hong Kong, June 17, 2014

- G. Rubino, "Discrete Event Simulation: generalities and the particular case of rare event analysis", in CSS'2014: the 3rd International Cybernetics Summer School, Ostrava, Czech Republic, June 2014.

- G. Rubino, "Automatic measuring of perceptual quality on the Internet", plenary talk at the First International Congress on Telematics, Computing and Communications (CITELC 2014), Mexico DF, Mexico, August 23, 2014.

- G. Rubino, "Monte Carlo y los eventos raros (Monte Carlo and rare events)", in the 3rd International AMMA Workshop, Technical University Federico Santa María, Valparaíso, Chile, December 2, 2014.

8.1.5. *Managing research activities*

- Bruno Sericola is responsible for the Inria Rennes - Bretagne Atlantique budget.

- Bruno Sericola is a member of the Inria Evaluation Committee which role is to assess the calibre of research conducted at Inria and to guarantee the quality of its hiring and internal promotions.

- Bruno Sericola is the leader of the research group MAPI (Math Appli Pour l'Info) the goal of which is to improve the collaboration between computer scientists and mathematicians.

- Adlen Ksentini was elected as secretary of the IEEE ComSoc Technical Committee on Software.

- Adlen Ksentini was elected as secretary of the IEEE ComSoc France Section.

- R. Marie and G. Rubino are members of the IFIP WG 7.3 (Working Group in Computer Performance Modeling and Analysis).

- Gerardo Rubino is a member of the Technical Committee on Multimedia Communications of IEEE.

- G. Rubino has been appointed as the Inria representative at the Scientific Committee of the IFCAM (Indo-French Center for Applied Mathematics), a joint international unit between Indian Ministry of Science and Technology and several French institutions including CNRS, Inria, École Polytechnique, École Normale Supéieure, Inria, Nice Sophia Antipolis University and University of Toulouse III.

- Gerardo Rubino is a member of the Research Commission of TELECOM Bretagne (advisory board for the research activities of the institution).
- Gerardo Rubino is a member of the CSV (Selection and Validation Committee) of the "Images et Réseaux" (Images and networks) cluster in the French Brittany Region. The cluster includes most companies and academic institutions working in networking and in image-based applications in Western France.
- César Viho is deputy director of the MATISSE (Mathematics, Electronics and Computer Sciences) doctoral school in charge of managing the recruitment of PhD students and their activities during their doctorate, in all the concerned areas of the doctoral school.

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Licence L2: Probability and Statistics, 40 hours, University of Science and Technology, Hanoi, Vietnam

Licence L3: Introduction to networks, 20 hours, Istic/University of Rennes 1, France

Master M1: Computer networks, 24 hours, Esir/University of Rennes 1, France

Master M1: Simulation, 18 hours, Université de Rennes 1, France

Master M1: Wireless Networks, 48 hours, Esir/University of Rennes 1, France

Master M1: Performance and dependability evaluation of computer systems, 54 hours M1, Istic/University of Rennes 1, France

Master M1: Introduction to graph theory, 14 hours, Esir/University of Rennes 1, France

Master M1: Networks and protocols, 24 hours, Istic/University of Rennes 1, France

Master M2: Simulation, 5 hours, Telecom Bretagne, France

Master M2: Logistic and performance, 8 hours, Faculté de Sciences économiques/University of Rennes 1, France

Master M2: Multimedia transmission, 36 hours, Istic/University of Rennes 1, France

Master M2: Multimedia streaming over IP (MMR), 50 hours, Esir/University of Rennes 1, France

Master M2: Multimedia services in IP networks (RSM), 29 hours, Esir/University of Rennes 1, France

Master M2: Software Defined Networks, 4 hours, Istic/University of Rennes 1, France

Master M2: Performance evaluation, 26 hours, ESIR/University of Rennes 1, France

Master M2: Performance Evaluation, 9 hours, M2, Université de Rennes 1, France

Master M2: Algorithms on graphs, 40 hours, Istic/University of Rennes 1, France

Master M2: Multimedia Networking, 8 hours, Istic/University of Rennes 1, France

8.2.2. Supervision

Master: Thuy Dung Mai, Economics of CDNs, Université de Rennes 1, 2014, supervised by Bruno Tuffin.

PhD: Romaric Ludinard, "Caractérisation locale de fautes dans les systèmes large échelle", Université de Rennes 1, 2/10/2014; advisors: Bruno Sericola and Emmanuelle Anceaume. See [10].

PhD: Leslie Murray, "New variance reduction methods in Monte Carlo rare event simulation", University of the Republic (UDELAR), Uruguay, 17/9/2014; advisors: Héctor Cancela (UDELAR) and Gerardo Rubino. See [11].

PhD: Claudio Risso, "Using GRASP and GA to design resilient and cost-effective IP/MPLS networks", University of the Republic (UDELAR), Uruguay, 5/5/2014; advisors: Franco Robledo (UDELAR) and Gerardo Rubino. See [12].

PhD in progress: Laura Aspirot, "Fluid Approximations for Stochastic Telecommunication Models", University of the Republic (UDELAR), Uruguay, started in December 2011; advisors: Ernesto Mordecki (UDELAR) and Gerardo Rubino.

PhD in progress: Damien Le Quéré, "Conception et étude des performances d'une solution auto-configurable pour les réseaux de transport du futur", started in January 2012; advisors: B. Sericola and A. Ksentini.

PhD in progress: Btissam Er-Rahmadi, Cifre Grant, Orange Labs, "Coopération et auto-* dans un réseau de small cells network", started on January 2013; advisors: C. Viho and A. Ksentini, University Rennes 1.

PhD in progress: Osama Arouk, "Cellular-based M2M communication: congestion control", started on December 2012; advisors: C. Viho and A. Ksentini, University Rennes 1.

PhD in progress: Farouk Messaoudi, "Orchestration et la virtualisation des ressources de terminaux, la vision Global OS", started on October 2014; advisor: A. Ksentini, University Rennes 1.

PhD in progress: Florient Grandhomme, "Etudes de protocoles de routage dynamique externe de type BGP dans un environnement réseaux tactiques adhoc mobiles : faisabilité, performances, qualité de service, et passage à l'échelle", started on October 2014; advisors: A. Ksentini, G. Guette, University Rennes 1.

PhD in progress: Jean-Michel Sanner, Cifre Grant, Orange Labs, "SDN technologies for network services performances adaptation of carriers networks"; started on January 2013; Advisors: Y. Hadjadj-Aoul and G. Rubino, University Rennes 1.

PhD in progress, Yue Li; Cifre Grant, Orange Labs; title: "Elaboration d'une architecture réseau unifiée, ouverte et flexible", started on October 2013; Advisors: Y. Hadjadj-Aoul and G. Rubino.

PhD in progress: Quang Pham Anh Tran, "QoE-based adaptive algorithms for wireless sensor networks", started on October 2013; advisors: C. Viho, University Rennes 1.

8.2.3. *Juries*

- B. Sericola was a member of the juries for the recruitment of young graduate scientists and senior researchers at Inria.

Bruno Tuffin was a member of the following PhD defense committees:

- Mariem Krichen, "Modèle technico-économique pour le déploiement d'un réseau femto avec partage de ressources", Université de Versailles Saint-Quentin, 2014, rapporteur.
- Luca Rose, "Decisional Process for Ad Hoc Networks", SUPELEC, Gif-sur-Yvette, January 2014, rapporteur.
- Tim Bereton, "Monte Carlo Methods for Complex Stochastic Models", The University of Queensland, Australia, 2014, rapporteur.
- Mohamed Lamine Lamali, "Qualité de Service et calcul de chemins dans les réseaux inter-domaine et multicouches", Université de Versailles Saint-Quentin, Septembre 2014, president.
- Vladimir Fux, "Game-theory approaches to study and influence interactions among self-interested agents in wireless networks", TELECOM Bretagne, November 2014, president.

Adlen Ksentini was a member of the following PhD defense committees:

- Malik Mubashir Hassan, "Gestion de la qualité de service dans les réseaux maillés IEEE 802.11s", Université de Versailles Saint-Quentin, Juin 2014, rapporteur.
- Shengyang Chen, "A Cross-layer Content-aware Energy-efficient Rich Media Application Delivery Scheme in Heterogeneous Wireless Networks", DCU, Dublin, Irlande, Octobre 2014, rapporteur.
- Petros Anapliotis, "Content-Aware Networking in Virtualised Environments for Optimised Resource Exploitation", Université de Bordeaux, December 2014, rapporteur.

Cesar Viho was a member of the following PhD defense committees:

- Hassan Ali Ahmad, "Design and Analysis of Distributed Mobility Management in IPv6 Mobile Networks", Telecom Bretagne, January 2014, president.
- Arnab Sinha, "Self-describing objects with tangible data structures", IRISA/Université Rennes 1, May 2014.
- Hamza Samih, "Test basé sur les modèles appliqué aux lignes de produits", IRISA/Université Rennes 1, December 2014, president.
- Siwar Ben Hadj Said, "Contextual Connectivity in Multi-Access Architectures", Telecom Bretagne, December 2014, president.

Gerardo Rubino was a member of the following PhD defense committees:

- José-Manuel Martínez, "Modelos Markovianos de Sistemas Computacionales y de Telecomunicaciones: Métodos Matemáticos y Algoritmos de Implementación", UFTSM (Universidad Técnica Federico Santa María), Valparaíso, Chile, November 11, rapporteur.
- Benoît Barbot, "Accélération pour le Model Checking Statistique", École Normale Supérieure de Cachan, November 20, rapporteur.
- Ait Solaht, "Chaînes de Markov incomplètement spécifiées : analyse par comparaison stochastique et application à l'évaluation de performance des réseaux", Université de Versailles Saint-Quentin, October 3, rapporteur.

8.3. Popularization

- In their position paper [79], Bruno Tuffin and his co-author Patrick Maillé discuss for a large audience the issues and challenges of network neutrality in response to the European parliament text voted in April 2014.
- G. Rubino makes regular presentations to high school students about the research work in general, and specific technical topics in particular. Current talks:
  - Randomness as a tool
  - Internet as a research problem
  - Great challenges in maths: the Riemann Hypothesis
  - Great challenges in math/computer science: the "P versus NP" problem

<p align="center" style="color:red">DYOGENE Project-Team</p>

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events selection

9.1.1.1. Chair of conference program committee

Marc Lelarge: ACM Sigmetrics TPC co-chair

9.1.1.2. Member of the conference program committee

Ana Bušić: IFIP Performance, Valuetools, IEEE SmartGridComm

Marc Lelarge: ESA, WiOpt, WEIS

9.1.1.3. Reviewer

The members of the team have served as reviewers for numerous international conferences.

9.1.2. Journal

9.1.2.1. Member of the editorial board

Marc Lelarge: IEEE's Transactions on Network Science and Engineering, Bernoulli Journal, Queueing Systems.

9.1.2.2. Reviewer

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

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence : Anne Bouillard (Cours) et Thomas Nowak (TD) *Structures et algorithmes aléatoires* 80heqTD, L3, ENS, France.

Licence : Marc Lelarge (Cours) et Anne Bouillard (TD) *Thèorie de l'information et du codage* 50heqTD, L3, ENS, France.

Master : Bartek Błaszczyszy (with Laurent Massoulié), *Graduate Course on point processes, stochastic geometry and random graphs* (program "Master de Sciences et Technologies"), 45h, UPMC, Paris 6, France.

Master : Bartek Błaszczyszy (with Laurent Decreusefond), *Graduate Course on Spatial Stochastic Modeling of Wireless Networks* (master program "Advanced Communication Networks), 45h, l'X and Telecom ParisTech, Paris.

Master : Anne Bouillard (Cours + TD) *Graphes aléatoires* 18heqTD, M1, ENS Cachan, France.

Master : Ana Bušić and Florian Simatos *Modèles et algorithmes de réseaux*, 50heqTD, M1, ENS, Paris, France.

Master: Ana Bušić, *Foundations of network models*, 18heqTD, M2, MPRI, France.

Licence : Marc Lelarge, *Théorie de l'information et codage*, 40h, L3, ENS, Paris, France.

Master : Marc Lelarge, *Algorithms for Networked Information*, 40h, M2, Ecole Polytechnique, France.

Doctorat : Francois Baccelli, *Stochastic Geometry*, Essén Lectures 2014 (May 12-16), Uppsala University, Sweden, http://www.math.uu.se/Essen/EssenLectures2014/.

9.2.2. Supervision

HdR : Anne Bouillard, *Algorithms and efficiency of Network Calculus* [1], ENS (Paris), 8 April 2014

PhD in progress :

- Kumar Gaurav, *Convex comparison of network architectures*, started in October 2011, advisor B. Blaszczyszyn;

- Miodrag Jovanović, *Evaluation and optimization of the quality perceived by mobile users for new services in cellular networks*, started in January 2012, advisor B. Blaszczyszyn, co-advisor M.Karray;

- Christelle Rovetta, *Applications of perfect sampling to queuing networks and random generation of combinatorial objects*, from December 2013, co-advised by Anne Bouillard and Ana Bušić.

9.2.3. Juries

- B. Blaszczyszyn was a reviewer of the PhD thesis of Andres Altieri [Supelec]

- M. Lelarge: External Examiner for PhD: Jiaming Xu (UIUC) 2014.

- M. Lelarge: membre du jury de recrutement CR2 Inria Paris-Rocquencourt.

<p style="text-align:center;color:red;">**FUN Project-Team**</p>

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. general chair, scientific chair

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

8.1.1.2. member of the organizing committee

- Valeria Loscri was organisation chair for SwanSity 2014.

8.1.2. Scientific events selection

8.1.2.1. responsable of the conference program committee

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

8.1.2.2. member of the conference program committee

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

8.1.2.3. invited speaker in scientific event

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

8.1.3. Journal

8.1.3.1. member of the editorial board

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

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

8.1.3.2. reviewer

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

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

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

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

8.2.2. Supervision

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

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

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

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

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

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

8.2.3. Juries

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

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

8.3. Popularization

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

GANG Project-Team

8. Dissemination

8.1. Promoting Scientific Activities

8.1.1. Scientific events organisation

8.1.1.1. General chair, scientific chair

Amos Korman has co-chaired and co-organized the BDA 2014 worksop http://www.cs.cmu.edu/~saketn/BDA2014/.This 2 day workshop brought together leading researchers in biology and distributed computing (from institutions such as MIT, Harvard, Stanford, and Weizmann) aiming to create a common platform for collaborations.

8.1.2. Scientific events selection

8.1.2.1. Chair of conference program committee

Pierre Fraigniaud has chaired the C track of the 41st International Colloquium on Automata, Languages, and Programming (ICALP 2014).

8.1.2.2. Member of the conference program committee

Michel Habib was member of the program committee of the 39th International Symposium on Mathematical Foundations of Computer Science (MFCS 2014).

8.1.2.3. Invited talks

Pierre Fraigniaud was keynote speaker at the 16th Interntional Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS 2014), Paderborn, Germany, Sep 28 - Oct 1, 2014.

Adrian Kosowski made a tutorial at the 5th Polish Combinatorial Conference, Bedlewo, September 2014.

Adrian Kosowski was invited speaker at Algotel 2014 - 16èmes Rencontres Francophones pour les Aspects Algorithmiques des Télécommunications, Ile de Ré, June 2014.

Laurent Viennot was invited speaker at the SMBE Satellite Meeting on Reticulated Microbial Evolution, April 27-30, 2014, Kiel, Germany.

Michel Habib made a tutorial at Ecole Rescom, France, May 2014.

8.1.3. Journal

8.1.3.1. Member of the editorial board

Pierre Fraigniaud is member of the editorial boards of Distributed Computing (DC), Theory of Computing Systems (TOCS), Fundamenta Informaticae (FI) and Journal of Interconnection Networks (JOIN).

8.2. Teaching - Supervision - Juries

8.2.1. Teaching

Master: Carole Delporte and Hugues Fauconnier, Algorithmique distribuée avec mémoire partagée, 6h, M2, Université Paris Diderot

Master: Hugues Fauconnier, Cours programmation répartie, 33h, M2, Univ. Paris Diderot

Master: Carole Delporte, Cours et TP Protocoles des services internet, 44h, M2, Univ. Paris Diderot

Master: Carole Delporte, Cours Algorithme réparti, 33h, M2, Univ. Paris Diderot

Master: Carole Delporte and Hugues Fauconnier, Protocoles Réseaux, 72h, M1, Université Paris Diderot

Licence: Hugues Fauconnier, Programmation objet et interfaces graphiques, 48h, L2-L3, EIDD

Licence: Carole Delporte et Hugues Fauconnier, Sécurité, 36h, L3, Univ. Paris Diderot

Licence : Boufkhad Yacine, Algorithmique et Informatique, 132h, L1, IUT de l'Université Paris Diderot

Licence : Boufkhad Yacine, Programmation Orientée Objet, 60h, L2, IUT de l'Université Paris Diderot

Master: Adrian Kosowski, Communication and Routing, 4.5h, M1, ENSEIRB-MATMECA

Master: Adrian Kosowski, Randomization in Computer Science: Games, Networks, Epidemic and Evolutionary Algorithms, 24h, M1, École Polytechnique

Master: Adrian Kosowski, Distributed Computing with Mobile Agents: Exploration, Rendezvous, and related problems, 12h, M2, IX Summer School on Discrete Mathematics in South America, Valparaiso, Chile

Licence : Fabien de Montgolfier, Introduction à la programmation, 26h, L1, Univ Paris Diderot

Licence : Fabien de Montgolfier, Programmation avancée (bio-informatique), 26h, L3, Univ. Paris Diderot

Master : Fabien de Montgolfier, Algorithmique avancée (bio-informatique), 26h, M1, Univ Paris Diderot

Licence : Fabien de Montgolfier, Systèmes et Réseaux, 52h, L3, Ecole d'Ingénieurs Denis Diderot

Master : Laurent Viennot, Système, réseau et Internet, 15h, M1, Univ. Paris Diderot

License : Michel Habib, Algorithmique, 45h, L, ENS Cachan

Master : Michel Habib, Algorithmique avancée, 24h, M1, Univ. Paris Diderot

Master : Michel Habib, Mobilité, 33h, M2, Univ. Paris Diderot

Master : Michel Habib, Méthodes et algorithmes pour l'accès à l'information numérique, 16h, M2, Univ. Paris Diderot

Master : Michel Habib, Algorithmique de graphes, 12h, M2, Univ. Paris Diderot

Licence : Pierre Charbit, Introduction a la Programmation, 30h, L1, Université Paris Diderot, France

Licence : Pierre Charbit, Automates finis, 52h, L2, Université Paris Diderot, France

Licence : Pierre Charbit, Types de Données et Objet, 52h, L1, Université Paris Diderot, France

Master : Pierre Charbit, Programmation, 60h, M2Pro PISE, Université Paris Diderot, France

Master : Pierre Charbit, Algorithmique de Graphes, 18h, M2 MPRI, Université Paris Diderot, France

8.2.2. Supervision

PhD: Jérémie Dusart, Parcours de graphes, applications aux graphes de cocomparabilité, Université Paris Diderot, defended June 2014, supervised by Michel Habib.

PhD: Antoine Mamcarz, Décompositions de trigraphes et parcours de graphes, Université Paris Diderot, defended June 30, 2014, supervised by Michel Habib.

PhD: Dominik Pajak, Algorithms for Deterministic Parallel Graph Exploration, Université de Bordeaux, defended June 13, 2014, supervised by Adrian Kosowski and Ralf Klasing.

PhD: The-Dang Huynh, Extensions de PageRank et Applications aux Réseaux Sociaux, Université Pierre et Marie Curie, since 2012, supervised by Fabien Mathieu, Dohy Hong and Laurent Viennot.

PhD: Leonardo Linguaglossa, Design of algorithms and protocols to support ICN functionalities in high speed routers, Université Paris Diderot, since 2013, supervised by Fabien Mathieu, Diego Perino and Laurent Viennot.

8.2.3. *Juries*

PhD : Hugues Fauconnier was member of the jury of Peva Blanchard, Synchronization and Fault-tolerance in Distributed Algorithms, Univ. Paris XI, September 24th

PhD : Laurent Viennot was reviewer of the thesis of Pierre-Alain Jachiet, Étude de l'évolution combinatoire des gènes par l'analyse de réseaux de similarité de séquence, Université Pierre et Marie Curie, July 2014, supervised by Eric Bapteste and Philippe Lopez

PhD : Laurent Viennot was reviewer of the thesis of Arnaud Jégou, Harnessing the power of implicit and explicit social networks through decentralization, Université de Rennes 1, September 2014, supervised by Anne-Marie Kermarrec and Davide Frey

PhD : Laurent Viennot was reviewer of the thesis of Pierre Halftermeyer, Connexité dans les réseaux et schémas d'étiquetage compact d'urgence, Université de Bordeaux, September 2014, supervised by Bruno Courcelle and Cyril Gavoille

PhD : Laurent Viennot was reviewer of the thesis of Aurélien Lancin, Étude de réseaux complexes et de leurs propriétés pour l'optimisation de modèles de routage, Université de Nice – Sophia Antipolis, December 2014, supervised by David Coudert

PhD : Fabien de Montgolfier was member of the jury of Pierre Clairet, Approche algorithmique pour l'amélioration des performances du système de détection d'intrusions PIGA, Université d'Orléans, defended on June 24th, 2014, supervised by Pascal Berthomé.

PhD : Fabien de Montgolfier was member of the jury of Antoine Mamcarz, Décompositions de trigraphes et parcours de graphes, Université Paris Diderot, defended on June 30th, 2014, supervised by Michel Habib.

8.3. Popularization

Laurent Viennot has written an article on the history of telecommunication networks with a special focus on the phone network and on Internet [13].

Laurent Viennot has animated a weekly workshop on computer science unplugged in the Pouchet primary school in Paris at CM1 level (15h during 2014). The topics covered included Nim game, Euler paths in graphs, and error correcting codes.

<div align="center">**HIPERCOM2 Team**</div>

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. general chair, scientific chair

Pascale Minet was co-chair with Leila Saidane of PEMWN 2014, organized in Sousse, Tunisia.
Selma Boumerdassi was chair of:

- The International Workshop on Trusted Platforms for Mobile and Cloud Computing (TPMCC 2014), April 2014 ;

- The International Workshop on Energy Management for Sustainable Internet-of-Things and Cloud Computing (EMSICC 2014), August 2014.

Nadjib Achir acted as track chair of the Internet of Things (IoT) track of the Selected Areas in Communications Symposium of IEEE Global Telecommunications Conference 2014.

9.1.1.2. member of the organizing committee

Paul Muhlethaler organized the DGA Inria workshop on Telecommunication and networking: "Software Defined Network (SDN) & MANET" in October 2014.
Christine Anocq was member of the organizing committee of the international conference PEMWN 2014.

9.1.2. Scientific events selection

9.1.2.1. member of the conference program committee

Pascale Minet was member of the program committee of:

- Ad Hoc Nets 2014, 6th International ICST Conference on Ad Hoc Networks, August 2014.

- DCNET 2014, International Conference on Data Communication Networking, August 2014,

- GLOBECOM 2014, IEEE Global Telecommunications Conference Selected Areas in Communications, December 2014.

- ICC 2014, IEEE International Conference on Communications, June 2014

- ICN 2014, International Conference on Networks, January 2014.

- IFIP Wireless Days 2014, November 2014.

- IROS 2014, IEEE/RSJ International Conference on Intelligent Robots and Systems, September 2014.

- Med-Hoc-Net 2014, 14th IEEE/IFIP Mediterranean Ad-Hoc Networking conference, June 2014.

- PECCS 2014, 4th international conference on Pervasive and Embedded Computing and Communication Systems, February 2014. and Adaptive Wireless Sensor Networks, in conjunction with NETYS 2013, Marrakech, Morocco, April 2013.

- RTNS 2014, 21st International Conference on Real-Time and Network Systems, September 2014.

- SNPD 2014, 13th International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing, June 2014.

Paul Muhlethaler was also member of:

- the Steering commitee of MobileHealth 2014, 4th ACM MobiHoc Workshop on Pervasive Wireless Healthcare In Conjunction With MobiHoc 2014 Conference, June 2014, Athens, Greece,

- the Technical committee of the third International conference on Performance Evaluation and Modeling in Wireless Networks, PEMWN 2014, November 2014, Sousse, Tunisia.

Cédric Adjih was member of the program committee of:

- AINTEC 2014, ACM Asian Internet Engineering Conference, November 2014.
- PEMWN 2014, 3rd International Conference on Performance Evaluation and Modeling in Wireless Networks, November 2014, Sousse, Tunisia.

Selma Boumerdassi was member of the program committee for:

- IEEE Global Telecommunications Conference, GLOBECOM 2014;
- IEEE International Conference on Communications, ICC 2014;
- International Workshop on Communicating Objects and Machine to Machine for Mission-Critical Applications, COMMCA 2014;
- IEEE Symposium on Computer Applications and Industrial Electronics, ISCAIE 2014;
- IEEE Symposium on Wireless Technology and Applications, ISWTA 2014.

Nadjib Achir was member of the program committee for:

- IEEE Global Telecommunications Conference, GLOBECOM 2014;
- IEEE International Conference on Communications, ICC 2014;
- IEEE Wireless Communications and Networking Conference, WCNC 2014;
- IEEE Consumer Communications & Networking Conference, CCNC 2014;
- Global Information Infrastructure and Networking Symposium, GIIS 2014.

9.1.3. Journal

9.1.3.1. member of the editorial board

Nadjib Achir acted as guest editor of the special issue "Planning and Deployment of Wireless Sensor Networks", of the International Journal of Distributed Sensor Networks.

9.1.3.2. reviewer

Pascale Minet was reviewer for the following journals:

- IEEE Transactions on Parallel and Distributed Systems
- International Journal of Sensor Networks,
- International Journal of Information and Communication Technology,
- Journal of Communications,
- Journal of Network and Computer Applications,
- Computer Communications Journal,
- Ad Hoc Networks Journal,
- Mathematical Problems in Engineering,
- Wireless Networks.

Paul Muhlethaler was reviewer for the following journals:

- IEEE Transactions on Wireless Communications,
- IEEE Transactions on Vehicular Technology,
- IEEE Transactions on Information Theory.

Nadjib Achir was reviewer for:

- Sensor Networks (MDPI),
- Wireless Communications and Mobile Computing (Wiley),
- Internet of Things Journal (IEEE),
- Ad Hoc Networks Journal (Elsevier).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence : **Ichrak Amdouni** taught "Principe et architecture des réseaux" and "Réseaux locaux et équipements actifs" at the university of Versailles Saint-Quentin (L1).

Master : **Pascale Minet** taught:

- Networks and quality of service in Master Systèmes Electroniques et Traitement de l'Information, at INSTN (Saclay).

- Mobile ad-hoc networks: medium access, routing and quality of service in Master Ingénierie informatique of the University of Marne-la-Vallée.

- Mobile ad hoc networks and wireless sensor networks: medium access, routing and energy efficiency in Master ScTIC (Systèmes complexes, Technologies de l'Information et du Contrôle) of the University of Paris 12.

9.2.2. Supervision

PhD :

- **Ridha Soua**, "Wireless Sensor Networks in Industrial Environment: Energy Efficiency, Delay and Scalability", University Pierre et Marie Curie - Paris 6, February 2014, Pascale Minet, adviser, Nadjib Achir, examinator.

- Ines Ben Jemaa, "Multicast communications for cooperative vehicular systems", Mines ParisTech, December 2014, Paul Muhlethaler, co-adviser, Nadjib Achir, reviewer.

9.2.3. Juries

HdR : Nadjib Achir, "Wireless Networks: Deployment and Quality of Service Provisioning", University Paris 13, 2014, Paul Muhlethaler, examinator.

PhD :

- Hicham Lakhlef, "Algorithmes distribués pour l'optimisation du déploiement des microbots MEMS"W, University of Franche Comté, November 2014, Pascale Minet, examinator.

- Zayneb Trabelsi Ayoub, "Déploiement large échelle des réseaux de capteurs sans fil IEEE 802.15.4 ZigBee", ENSI, Tunisia, november 2014, Paul Muhlethaler, reviewer, Pascale Minet, examinator.

- Salsabil Gherairi, "Garantie des délais des trafics temps réel pour les réseaux de capteurs sans fil", ENSI, Tunisia, Novemver 2014, Pascale Minet, examinator.

- Rima Hatoum, "Algorithmes d'ordonnancement inter-couches avec adaptation de modulation et de codage dans des réseaux hétérogènes", University of Paris 6, June 2014, Nadjib Achir, reviewer.

- Ibtissem Boulanouar, "Algorithmes de suivi de cible mobile pour les réseaux de capteurs sans fil", University of Paris Est, June 2014, Nadjib Achir, reviewer.

- Sara Mehar, "Le véhicule comme source et consommateur d'informations : collecte, dissémination et traitement de données pour une mobilité durable", University of Bourgogne, December 2014, Paul Muhlethaler, president.

9.3. Popularization

- **the Inria-Industry meeting focusing on Telecommunications**, in Rocquencourt, November 2014. The HIPERCOM2 team was very active and presented demonstrations of Wireless Sensor Networks. The demonstration prepared by Erwan Livolant, Cédric Adjih, Ichrak Amdouni, Pascale Minet concerned the principles of wireless sensor networks, the energy-efficient routing protocol, the node coloring algorithm running in the OCARI network to maximize network lifetime. Tuan Dang from EDF presented the new OCARI platform. Maurice Sellin from DCNS explained the deployment of an OCARI network in a DCNS ship, the application supported is fire detection and OCARI sensor nodes are provided by ADWAVE.

- Nadjib Achir, Cédric Adjih, Hana Baccouch, Ichrak Amdouni, Erwan Livolant and Ridha Soua explained the principles of communication and routing in wireless sensor networks and organized several demonstrations for undergraduates and students who visited Inria in February 2014.

INFINE Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. Member of the organizing committee

Aline Carneiro Viana served as:

- Workshop co-Chair of the 11th Annual IEEE International Conference on Sensing, Communication, and Networking (SECON 2014);
- Grant Chair of the N2Women 2014 Workshop (an ACM SIGMOBILE program that is supported by the IEEE Communications Society, Microsoft Research and HP Labs)
- Publicity Chair of 12th Annual IEEE International Conference on Sensing, Communication, and Networking (IEEE SECON 2015), 20th Annual ACM International Conference on Mobile computing and Networking (ACM MobiCom 2014) and IEEE IFIP Wireless Days 2014;
- Publication co-Chair of 21st Annual ACM International Conference on Mobile computing and Networking (ACM MobiCom 2015);

Emmanuel Baccelli served as:

- co-Chair of the 4th ACM MOBIHOC Workshop on Pervasive Wireless Healthcare (MobileHealth 2014);

9.1.2. Scientific events selection

9.1.2.1. Responsable of the conference program committee

- **Aline Carneiro Viana** is the TPC co-chair of the Symposium on Selected Topics in Communications together Jun Luo (from Nanyang Technological University, Singapore) to be organized jointly with IEEE/CIC International Conference on Communications in China (ICCC 2015)

9.1.2.2. Member of the conference program committee

Aline Carneiro Viana has served in the program committees of the following conferences/workshops:

- 7th IFIP International Conference on New Technologies, Mobility and Security (IFIP NTMS 2015)
- 12th Annual IEEE Conference on Sensing, Communication and Networking (IEEE SECON 2015)
- IEEE IFIP Wireless Days 2014
- IEEE 10th International Conference on Wireless and Mobile Computing, Networking and Communications (IEEE WiMob'2014)
- 32th Simpósio Brasileiro de Redes de Computadores e Sistemas Distribuídos (SBRC 2014)

Cédric Adjih has been TPC member/reviewer for: IEEE Globecom 2014 (Global Communications Conference), and IEEE ICC 2015 (International Conference on Communications)

Emmanuel Baccelli has been TPC member for: IEEE SECON 2014 (IEEE Conference on Sensing, Communication and Networking), and SaSeIoT 2014 (International Conference on Safety and Security in Internet of Things).

9.1.3. Journal

9.1.3.1. Member of the editorial board

- **Aline Carneiro Viana** is Associate Editor of ACM Computer Communication Review (ACM CCR)

9.1.3.2. Reviewer

Aline Carneiro Viana has performed reviews for the following journals/transactions:

- IEEE Transaction on Mobile Computing (TMC)
- IEEE Transactions on Parallel and Distributed Systems (TPDS)
- IEEE Wireless Communications Magazine
- Elsevier: Computer Communications; Elsevier Computer Networks; Elsevier Ad Hoc Networks; Pervasive Mobile Computing (PMC); Sustainable Computing, Informatics and Systems (SUS-COM)
- IEEE Communications Letters

Cédric Adjih has performed reviews for the IEEE Journal on Selected Areas in Communications (JSAC), and the journal "Ad Hoc Networks".

Emmanuel Baccelli has performed reviews for the following journals/transactions:

- IEEE Transactions on Sensor Networks,
- IEEE Transactions on Emerging Telecommunications Technologies.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Engineering School: Cédric Adjih, "Microcontrollers: from embedded systems to the Internet of Things", 3 hours TD, Telecom SudParis.

Masters

Emmanuel Baccelli, "Telematics", M1 Advanced Computer Networks, at Freie Universitaet Berlin; 15 semaines, 50 étudiants.

E-learning

Master: Laurent Massoulié, "epidemic algorithms", M2 ACN (Advanced Communication Networks) entre Ecole Polytechnique et Institut Telecom; 11 semaines, 4 étudiants. "Graphes aléatoires", M2 Probabilités et Statistiques, 4 semaines, UPMC, 10 étudiants.

9.2.2. Supervision

Aline Carneiro Viana:

- PhD: **Thiago Henrique Silva**, *"Large scale study of city dynamics and urban social behavior using participatory sensor networks"*, Federal University of Minas Gerais, May 2014.
- PhD in progress: **Eduardo Mucelli**, *"Revealing new facets of humain behavior"*, November 2011, Aline Carneiro Viana. **Felipe Domingos**, *"Identifying Social Attributes in VANETs"*, January 2013, Aline Carneiro Viana. **Roni Shigueta**, *"Resource allocation in highly mobile wireless networks"*, January 2012, Aline Carneiro Viana. **Guangshuo Chen**, *"Understanding and predicting human demanded content and mobility"*, September 2014, Aline Carneiro Viana.
- Post-doc in progress: K. P. Naveen on content caching and content-centric networking.

Cédric Adjih:

- PhD in progress: **Fatma Somaa**, on handling mobility in routing in wireless sensor networks, thesis started in 2013 and co-advised with Inès El Korbi (Institut Supérieur d'Informatique et de Gestion de Kairouan, Tunisie).

Emmanuel Baccelli:

- PhD in progress: **Oliver Hahm** on the optimization of energy-efficient communication protocols for the Internet of Things, **Hauke Petersen** on the resilience of emergency spontaneous wireless networks.

- Post-doc in progress: **K. P. Naveen** on content caching and content-centric networking.

- Masters thesis in the domain of IoT, during 2014: 1 completed, 3 on-going.

- Bachelor thesis in the domain of IoT, during 2014: 2 completed.

9.2.3. *Juries*

Aline Carneiro Viana:

- **Examiner:***Oana Iova*, "Algorithms and Protocols for all-IP Wireless Sensor Networks in the Internet of Things", Université de Strasbourg, France. December 2014. *Tiphaine Phe-Neau*, "Properties and impact of vicinity in mobile opportunistic networks ", UPMC – Sorbonne Universités, France. January 2014.

- **Invited:***Thiago Henrique Silva* "Large scale study of city dynamics and urban social behavior using participatory sensor networks" at the Federal University of Minas Gerais, Brazil, May 2014.

- **PhD Qualification advisor:***Felipe Domingos*, *"Identifying Social Attributes in VANETs"*, at the Federal University of Minas Gerais, Brazil, August 29, 2014. *Roni Shigueta*, *"Reseource allocation in mobile networks"*, at the Pontifical University of Paraná (PUC-PR), Brazil, November 26, 2014.

9.3. Popularization

Aline Carneiro Viana:

- **Presentation at the "Futur en Seine" festival:** Title: *"Understanding human behavior for context- and content- networking"*, June 12, 2014.

- **Presentation at the ESSOURIAU High School at Ulis in the context of the Math week:** Title: *"Le smartphone, votre 6e sens ?"*, Mars 21, 2014.

- **Interview for the Interstices scientific magazine**.

Cédric Adjih, Emmanuel Baccelli, Oliver Hahm:

- **Demonstration of RIOT** at CeBIT 2014, the world's leading IT trade show.

- **Description of IoT-LAB, and test of IoT-LAB nodes** at the IETF 6TiSCH plugfest during IETF-89 in London.

- **Demonstration of RIOT on heterogeneous IoT hardware** At the IETF 6TiSCH plugfest during IETF-89 in London (https://bitbucket.org/6tisch/meetings/wiki/140306a_ietf89_london_plugfest).

- **Demonstration of IoT-LAB (Contiki RPL experiments)** at the Bits-n-Bytes event of IETF-90 in Toronto.

- **Demonstration of RIOT (CCN - 6LoWPAN interoperating)** at the Bits-n-Bytes event of IETF-90 in Toronto.

- **Demonstration of IoT-LAB** also at the LLN plugfest of the same IETF-90 in Toronto.

- **Demonstration of RIOT tsch functionalities with OpenWSN integration** at the LLN plugfest of the same IETF-90 in Toronto.

Oliver Hahm co-authored an article on RIOT and IoT device programming in the iX Developer magazine's 2014 special issue on Embedded Software. O. Hahm, C. Mehlis, M. Lenders, T. Eichinger, L. Ortmann, "Betriebssysteme für eingebettete Systeme im Internet der Dinge: Freie Fahrt für Experimentierfreudige," iX Developer Magazine, Special issue on Embedded Software, February 2014.

MADYNES Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. General chair, scientific chair, session chair

- Abdelkader Lahmadi: CSSMA Symposium – ICC 2014 (session chair), IEEE/IFIP International Workshop on Management of the Future Internet – MANFI (session chair)
- Bernardetta Addis: 2014 10th International Conference on Modeling, Optimization and SIMulation – Mosim (session chair)
- Jérôme François: IFIP/IEEE International Symposium on Integrated Network Management – IM (session chair)

9.1.1.2. Organizing committee membership

- Rémi Badonnel: IEEE Global Information Infrastructure and Networking Symposium (IEEE GIIS'14), IFIP/IEEE International Symposium on Integrated Network Management (IFIP/IEEE IM'15)

9.1.2. Scientific events selection

9.1.2.1. Conference program committee chairing

- Rémi Badonnel: IEEE Global Information Infrastructure and Networking Symposium - Special Track on Cloud Infrastructures and Networking (IEEE GIIS'14), IFIP/IEEE International Symposium on Integrated Network Management (IFIP/IEEE IM'15)
- Thomas Silverston: Crowdsensing 2014

9.1.2.2. Conference program committee membership

- Abdelkader Lahmadi: IEEE/IFIP International Workshop on Management of the Future Internet (MANFI'14), Crowdsensing 2014
- Françoise Simonot-Lion: 10th IEEE International Workshop on Factory Communication Systems (WFCS 2014).
- Isabelle Chrisment: International Conference on Applied Cryptography and Network Security (ACNS'14), IFIP International Conference on Autonomous Infrastructures, Management and Security (IFIP AIMS'14), IFIP International Conference on Communications and Multimedia Security (IFIP CMS'14), International Conference on Advanced Networking, Distributed Systems and Applications (INDS'14), IFIP/IEEE International Symposium on Network Operations and Management (IEEE NOMS'14); National conference on Sécurité des Architectures Réseaux et des Systèmes d?Information (SARSSI 2014- Member of the Steering Committee).
- Jérôme François: 8th IFIP International Conference on Autonomous Infrastructure, Management and Security – AIMS, IEEE/IFIP Network Operations and Management Symposium – NOMS, Cyber Security Analytics and Automation colocated with ACM CCS, European Wireless, Principles, Systems and Applications of IP Telecommunications – IPTComm, Global Information Infrastructure and Networking Symposium – GIIS

- Rémi Badonnel: IFIP/IEEE International Symposium on Network Operations and Management (IEEE NOMS'14), IEEE Global Information Infrastructure and Networking Symposium (IEEE GIIS'14), IFIP/IEEE International Symposium on Integrated Network Management (IFIP/IEEE IM'15), IFIP International Conference on Autonomous Infrastructures, Management and Security (IFIP AIMS'14), IEEE International Conference on Consumer Communications and Networking (IEEE CCNC'15), Conference on Services and Networks Management (GRES'14), International Workshop on Software Defined Networking and Network Function Virtualisation (IEEE ManSDN/NFV'14), IFIP/IEEE International Workshop on Future Internet Management (IFIP/IEEE MANFI'14), Rencontres Francophones sur l'Algorithmique des Té´lécoms (ALGOTEL'14)

- Ye-Qiong Song: 19th IEEE international conference on Emerging Technologies & Factory Automation (ETFA'2014) - Industrial communication systems track ; 12th International Conference On Smart homes and health Telematics (ICOST 2014); 13th International Workshop on Real-Time Networks (RTN 2014); 10th IEEE International Workshop on Factory Communication Systems (WFCS 2014); 7th IFIP Wireless and Mobile Networking Conference (WMNC 2014); 12th International Conference on Embedded Computing (EmbeddedCom 2014); 2nd International Workshop on compressive Sensing in Cyber-Physical Systems, Co-located with the 11th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS 2014).

9.1.2.3. Reviewing activities

- Abdelkader Lahmadi: IFIP/IEEE International Symposium on Integrated Network Management (IFIP/IEEE IM'15), Special Track on the Management of the Internet of Things (IEEE NOMS'14).

- Bernardetta Addis: 2014 10th International Conference on Modeling, Optimization and SIMulation (Mosim), 2015 IEEE 12th Consumer Communications and Networking Conference (CCNC)

- Françoise Simonot-Lion: 10th IEEE International Workshop on Factory Communication Systems (WFCS 2014).

- Isabelle Chrisment: International Conference on Applied Cryptography and Network Security (ACNS'14), IFIP International Conference on Autonomous Infrastructures, Management and Security (IFIP AIMS'14), IFIP International Conference on Communications and Multimedia Security (IFIP CMS'14), International Conference on Advanced Networking, Distributed Systems and Applications (INDS'14), IFIP/IEEE International Symposium on Network Operations and Management (IEEE NOMS'14).

- Emmanuel Nataf: SENSORSNET 2015

- Rémi Badonnel: IFIP/IEEE International Symposium on Network Operations and Management (IEEE NOMS'14), IEEE Global Information Infrastructure and Networking Symposium (IEEE GIIS'14), IFIP/IEEE International Symposium on Integrated Network Management (IFIP/IEEE IM'15), IFIP International Conference on Autonomous Infrastructures, Management and Security (IFIP AIMS'14), IEEE International Conference on Consumer Communications and Networking (IEEE CCNC'15), Conference on Services and Networks Management (GRES'14), International Workshop on Software Defined Networking and Network Function Virtualisation (IEEE ManSDN/NFV'14), IFIP/IEEE International Workshop on Future Internet Management (IFIP/IEEE MANFI'14), Rencontres Francophones sur l'Algorithmique des Télécoms (ALGOTEL'14)

- Thibault Cholez: Applied Cryptography and Network Security 2014, IFIP/IEEE International Symposium on Network Operations and Management (IEEE NOMS'14), IFIP/IEEE International Symposium on Integrated Network Management (IFIP/IEEE IM'15), IEEE International Conference on Communications (ICC'15)

- Ye-Qiong Song: 19th IEEE international conference on Emerging Technologies & Factory Automation (ETFA'2014) - Industrial communication systems track ; 12th International Conference On Smart homes and health Telematics (ICOST 2014); 13th International Workshop on Real-Time Networks (RTN 2014); 10th IEEE International Workshop on Factory Communication Systems (WFCS 2014); 7th IFIP Wireless and Mobile Networking Conference (WMNC 2014); 12th International

Conference on Embedded Computing (EmbeddedCom 2014); 2nd International Workshop on compressive Sensing in Cyber-Physical Systems, Co-located with the 11th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS 2014).

9.1.3. Journal

9.1.3.1. Editorial board membership

- Françoise Simonot-Lion: IEEE Transactions on Industrial Informatics (associated editor).
- Ye-Qiong Song: Elsevier Computers and Electrical Engineering journal (associate editor); Journal of Multimedia Information System (associate editor).

9.1.3.2. Reviewing activities

- Abdelkader Lahmadi: Springer's Journal of Network and Systems Management (JNSM), IEEE Communications Magazine, IEEE Transactions on Network and Service Management (TNSM), International Journal of Network Management (IJNM).
- Bernardetta Addis: Computer Communications, Computers and Operations Research, Computational Optimization and Applications, Discrete and Applied Mathematics, European Journal of Operations Research, Journal of Combinatorial Optimization, Journal of Global Optimization, Mathematical Methods of Operations Research, IEEE/ACM Transactions on Networking
- Françoise Simonot-Lion: Journal Mathematical Problem in Engineering, IEEE Transactions on Industrial Informatics.
- Isabelle Chrisment: IEEE Communications Magazine, Security and Communication Networks, Computer Networks, Privacy in a Digital, Networked World -Technologies, Implications and Solutions (book) , ARIMA Journal (Revue Africaine de la Recherche en Informatique et Mathématiques Appliquées)
- Jérôme François: IEEE Transactions on Network and Service Management, Elsevier Computer Networks, International Journal of Network Management – IJNM
- Rémi Badonnel: IEEE Transactions on Network and Service Management (IEEE TNSM), Springer's Journal of the Network and Systems Management (JNSM)
- Thibault Cholez: IEEE Transactions on Network and Service Management, IEEE Transactions on Information Forensics and Security, IEEE Transactions on Computers, Elsevier Computer Networks, Journal of Communications and Networks
- Ye-Qiong Song: Elsevier Computers and Electrical Engineering journal (associate editor); Journal of Multimedia Information System (associate editor); IEEE Transactions on Industrial Informatics; Journal of distributed sensor networks; IEEE Transactions on Cloud Computing; ACM Transactions on Architecture and Code Optimization.

9.1.4. Other animation activities

Isabelle Chrisment is a member of AFNIC scientific board since January 2013

Isabelle Chrisment is the Co-Chair together with Ahmed Serhrouchni from Telecom ParisTech of the IFIP Task Force 6.5 on Secure Networking. This Task Force provides a framework for the organization of activities within the scope of secure networking. It facilitates international cooperation activities and exchanges in this area.

Olivier Festor is Chair of the IFIP Working-Group 6.6 on Network and systems management. This working group is actively involved the animation of most major conferences in this research area and organizes frequent meetings and workshops on the domain.

Olivier Festor is the Co-chair together with Lisandro Zambenedetti Grandvile from the Federal University of Rio Grande do Sul (UFRGS) of the Internet Research Task Force (IRTF) Network Management Research Group since march 2011.

Françoise Simonot-Lion is Scientific Delegate with HCERES.

Françoise Simonot-Lion was member of the review panel of the research evaluation at Mälardalen University (May 2014).

Françoise Simonot-Lion was chair of the review panel of the research evaluation of Department DTIM at ONERA (December 2014).

Ye-Qiong Song is the member of the jury of the Gilles Kahn best PhD thesis award.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

There is a high demand on networking courses in the various universities in which LORIA is part of. This puts high pressure on MADYNES members which are all in charge of numerous courses in this domain. Especially the team professors and associate professors ensure more than the required amount of teaching obligation in their respective institutions: IUT, bachelor, master, TELECOM Nancy, ENSEM and École des Mines de Nancy engineering schools.

Laurent Andrey was the Head of Department of the Charlemagne IUT specialization on multimedia networking until the end of the academic year 2014.

Olivier Festor is the Director of the TELECOM Nancy Engineering School. Remi Badonnel is heading the Telecommunications and Networks specialization of the 2nd and 3rd years at the TELECOM Nancy engineering school, and is also in charge of the 2nd year design and development projects at the same school. They teach the networking related courses in this cursus.

Isabelle Chrisment was co-directing the school and in charge of the students recruitment process until September 2014.

Laurent Ciarletta is heading the specialization Safe Systems Architecture of the Computer Science and IT department of the Ecole des Mines de Nancy ("Grande Ecole", Engineering School, Master degree level). He is most notably in charge of Advanced Networking, Middleware, Component-based software development, Pervasive Computing, Networking and Systems courses at the Ecole des Mines de Nancy. Notably, within the ARTEM alliance (ICN - Business School, Mines Nancy, Ecole d'Art / School of Art), he is a member of the Research Committee, more specifically with the "Smart Working Spaces" research theme, and he is co-responsible for the "Businesses: the digital challenge *CORP 3.0, Entreprises: le défi numérique* and the *Imagineries and the Workspaces*, 2 classes within the ARTEM alliance (over 90 hours).

Thomas Silverston was in charge of the SSSR Master degree at IGA (Morroco).

Team members are teaching the following courses:

Abdelkader Lahmadi
- 280 hours
- Level: Engineering degree (L1, M1, M2)
- Algorithms and Java programming, C language programming, Real Time systems, Databases, Distributed algorithms, constrained systems programming
- ENSEM - Engineering school

Bernardetta Addis
- 158 hours
- Level: M2
- Operations Research, Discrete Optimization
- Ecoles de Mines de Nancy

Isabelle Chrisment
- 220 hours

- Engineering/Master Degree in Computer Science
- C and Shell Programing, Computer Networking, Operating Systems, Network Security.
- TELECOM Nancy Engineering School of Computer Science

Jérôme François

- 28 hours
- Master 2
- Network security, Hadoop
- Univ. Lorraine, Telecom Nancy

Emmanuel Nataf

- 192 hours
- L1 L2 M2
- Network, operating system, network monitoring
- IUT Nancy-Charlemagne, Telecom Nancy, Université de Lorraine

Olivier Festor

- 192 hours
- Engineering/Master Degreee in Computer Science
- Network, Programming, Algorithmics, Complexity
- TELECOM Nancy Engineering School of Computer Science

Rémi Badonnel

- 242 hours
- Engineering/Master Degree in Computer Science
- Networks, Systems and Services, Network Management, Software Design and Programming, Cloud Computing
- TELECOM Nancy Engineering School of Computer Science

Thibault Cholez

- 258 hours
- Level: Engineering/Master Degree in Computer Science (L2, M1, M2)
- Main topics: Computer Networks, Databases, Object-Oriented Programming, C and Shell Programming, Techniques and Tools for Programming, Network Services, Constraint development on small Connected Objects, Mobile applications and Internet of Things.
- Main location: TELECOM Nancy Engineering School in Computer Science

Thomas Silverston

- 300 hours
- Level: Master Degree in Computer Science
- Networking, Network Security and VoIP
- Main location: University of Lorraine

Ye-Qiong

- 242 hours
- Level: Engineering degree (L1, M1, M2)
- Algorithms and Java programming, networking, Databases, sensor networks.
- ENSEM - Engineering school

E-learning

MOOC, Introduction to Nagios-based Monitoring (45 minutes, English), Flamingo Network of Excellence, 8900 views in less than 1 year.

9.2.2. Supervision

PhD: Martin Barrere, Vulnerability Management in Autonomic Networks and Systems, University of Lorraine, since Jun 2014, supervised by Olivier Festor, Rémi Badonnel

PhD in progress: Elian Aubry, Using Software Defined Network to manage Content Centric Networks, since October 2013, supervised by Isabelle Chrisment, Thomas Silverston.

PhD in progress: César Bernardini, Réseau orienté-contenu basé sur les communautés d'utilisateurs, since Nov 2011, supervised by Olivier Festor et Thomas Silverston

PhD in progress: Francois Despaux, QoS in wireless sensor and actuator networks, since November 2011, supervised by Ye-Qiong Song, Abdelkader Lahmadi

PhD in progress: Gaëtan Hurel, Mobile Cloud Security, since Jan 2014, supervised by Olivier Festor, Rémi Badonnel, Abdelkahder Lahmadi

PhD in progress: Patrick-Olivier Kamgue, Routing management in WSNs, since Jun 2012, supervised by Emmanuel Nataf and Olivier Festor in France, Thomas Djotio in Cameroun

PhD in progress: Samuel Marchal, honeypot and malware analysis, since October 2013, supervised by Olivier Festor in France, Thomas Engel in Luxembourg

PhD in progress: Anthéa Mayzaud, Monitoring ans Security for the Internet of Things, since May 2013, supervised by Isabelle Chrisment, Rémi Badonnel

PhD in progress: Kevin Roussel : Dynamic management of QoS and energy in heterogenous sensor and actuator networks for e-health applications, since Dec 2012, supervised by Ye-Qiong Song

PhD in progress : Mohamed Said Seddiki, Allocation des ressource dans la virtualisation des réseaux, since Mar 2013, supervised by Ye-Qiong Song, and by Mounir Frikha in Tunisia

PhD in progress: Evangelia Tsiontsiou , Multiconstrained QoS routing for wireless sensors networks with applications to smart space for ambient assisted living, since October 2013, supervised by Ye-Qiong Song, Bernardetta Addis

PhD in progress: Shbair Wazen, Contributions for the Management of HTTPS traffic, since December 2013, supervised by Isabelle Chrisment and Thibault Cholez

9.2.3. Juries

Team members participated to the following Ph.D. defense committees:

- Tristan Groléat, Ph.D. in Computer Science from Université Européenne de Bretagne, Télécom Bretagne Title: High Performance traffic monitoring for network security and management, March 2014 – (Isabelle Chrisment)
- Truong Khoa Phan, Ph.D. in Computer Science from Université de Nice - Sophia Antipolis. Title: Design and Management of Networks with Low Power Consumption, September 2014 – (Bernardetta Addis)
- Houari Mahfoud, Ph.D. in computer science from Université de Lorraine. Title: Efficient Access Control to XML Data: Querying and Updating Problems, Feb. 2014 – (Ye-Qiong Song)
- Nadine Abdallah, Ph.D. in control and applied computer science from Université de Nantes. Title: Multiprocessor real-time partitioning with Quality of Service requirements and energy constraints, Feb. 2014 – (Ye-Qiong Song)
- Ridha Soua, Ph.D. in comupter science from Université Pierre et Marie Curie Paris 6. Title: Wireless Sensor Networks in Industrial Environment: Energy Efficiency, Delay and Scalability, Feb. 2014 – (Ye-Qiong Song)
- William Mangoua Sofack, Ph.D. in computer science from Université de Toulouse. Title: Amélioration des délais de traversés pire cas des réseaux embarqués à l'aide du calcul réseau, June 2014 – (Ye-Qiong Song)

- Philippe Thierry, Ph.D. in computer science from Université Paris-Est. Title: Systè`mes véhiculaires à` domaines de sécurité et de criticité multiples : une passerelle systronique, July 2014 – (Ye-Qiong Song)
- Hamdi Ayed, Ph.D. in networking, telecommunications, systems and architectures from Université de Toulouse. Title: Analysis and optimization of multi-cluster avionics networks, November 2014 – (Ye-Qiong Song)
- Yan Han, Ph.D. in computer science from Université de Rennes 1. Title: Smart devices collaboration for energy saving in home networks, December 2014 – (Ye-Qiong Song)

Team members acted as reviewer for the following Ph.D. thesis:

- Inad Nawajah, Ph.D. in Mathematical Models and Methods in Engineering from Politecnico di Milano. Title: Bayesian Analysis of home care longitudinal counts data, 2014 – (Bernardetta Addis)
- Wei You, Ph.D. in Computer Science from Université Européenne de Bretagne, Télécom Bretagne Title: A Content-Centric Networking Node for a Realistic Efficient Implementation and Deployment, January 2014 – (Isabelle Chrisment)
- Antoine Lavignotte, Ph.D. in Computer Science from Université de Saint-Etiienne Title: Prise en compte de la qualité de l'expérrance utilisateur au sein des protocoles de streaming adaptatifs, Mai 2014 – (Isabelle Chrisment)
- Silvia Gil Casals, Ph.D. in Computer Science from Université de Toulouse, Title: Risk Assessment and Intrusion Detection for Airborne Networks, July 2014 – (Isabelle Chrisment)
- Rim Moalla, Ph.D. in Computer Science from Télécom ParisTech and Université Pierre et Marie Curie. Title: Secure Future Cooperative ITS Applications, (September 2014) – (Isabelle Chrisment)
- Ludie Akue, Ph.D. in COmputer Science from Université de Toulouse, Title: Un cadriciel pour la vérification en ligne, générique, flexible et évolutive de configurations de systèmes communicants complexes, (February 2014) – (Olivier Festor)
- Raphael Barbosa, Ph.D. in Computer Science from University of Twente, Title: Anomaly Detection in SCADA systems, (Febrary 2014) – (Olivier Festor)
- Rebecca Steinert, Ph.D. in Computer Science from KTH, Title: Probabilistic Fault Management in Networked Systems, (June 2014) – (Olivier Festor)
- Anthony Dessiatnikoff, Ph.D. in Computer Science from Université de Toulouse, Title: Analyse de Vulnérabilités de systèmes avioniques embarqués: classification et expérimentation, (June 2014) – (Olivier Festor)
- Ghida Ibrahim, Ph.D. in Computer Science and Networking from TELECOM ParisTech, Title: Evolution of the Control Plane for Future Content Distribution Services, (june 2014) – (Olivier Festor)
- Ahmed Amokrane, PhD in Computer Science from Pierre et marie Curie University Title: Green et Effcacité en Energie dans les Réseaux d'Accès et Infrastructures Cloud, ((December 2014) – (Olivier Festor)
- Ridha Soua, Ph.D. in comuputer science from UNIVERSITY PARIS 6 PIERRE ET MARIE CURIE. Title: Wireless Sensor Networks in Industrial Environment: Energy Efficiency, Delay and Scalability, Feb. 2014 – (Ye-Qiong Song)
- William Mangoua Sofack, Ph.D. in computer science from Université de Toulouse. Title: Amélioration des délais de traversés pire cas des réseaux embarqués à l'aide du calcul réseau, June 2014 – (Ye-Qiong Song)
- Philippe Thierry, Ph.D. in computer science from Université Paris-Est. Title: Systèmes véhiculaires à domaines de sécurité et de criticité multiples : une passerelle systronique, July 2014 – (Ye-Qiong Song)
- Hamdi Ayed, Ph.D. in networking, telecommunications, systems and architectures from Université de Toulouse. Title: Analysis and optimization of multi-cluster avionics networks, November 2014 – (Ye-Qiong Song)
- Yan Han, Ph.D. in computer science from Université de Rennes 1. Title: Smart devices collaboration for energy saving in home networks, December 2014 – (Ye-Qiong Song)

Team members participated to the following Habilitation Degree defense committees:

- Stefano Secci, , Habilitation Degree in Computer Science from Pierre et Marie Curie - Paris 6 University. Title: Modeling and Evaluating Novel Networked Communications Systems, (September 2014) – (Olivier Festor)

- (Liliana Cucu-Grosjean), Habilitation Degree in (Computer Science) from (Université Paris 6). Title: (Contributions to real-time systems), (May 2014) — (Françoise Simonot-Lion)

MAESTRO Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. General chair, scientific chair

- 7th Intl. Conference on Network Games, Control and Optimization (NETGCOOP 2014, Trento, Italy) (**E. Altman** as steering committee chair);
- 8th Intl. Conference on Performance Evaluation Methodologies and Tools (VALUETOOLS 2014, Bratislava, Slovakia) (**E. Altman** as steering committee co-chair);
- 2nd IEEE Intl. Workshop on Self-Organizing Networks (SONETS 2014, Istanbul, Turkey) (**M. Haddad** as workshop co-chair);
- 10ème Atelier en Evaluation de Performances (AEP10, Sophia Antipolis, France) (**S. Alouf** and **A. Jean-Marie**) [76].

9.1.1.2. Member of the organizing committee

- 33rd IEEE Intl. Conference on Computer Communications (IEEE INFOCOM 2014, Toronto, Canada) (**G. Neglia** as publicity chair);
- 32nd Intl. Symposium on Computer Performance, Modeling, Measurements and Evaluation (IFIP WG 7.3 Performance 2014, Turin, Italy) (**P. Nain** as steering committee member);
- 12th Intl. Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt 2014, Hammamet, Tunisia) (**E. Altman** as steering committee member);
- 10ème Atelier en Evaluation de Performances (AEP10, Sophia Antipolis, France) (**J. K. Sreedharan**).

9.1.2. Scientific events selection

9.1.2.1. Chair of the conference program committee

- 2nd IEEE Intl. Workshop on Self-Organizing Networks (SONETS 2014, Istanbul, Turkey) (**M. Haddad** as workshop co-chair);
- 12th Intl. Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt 2014, Hammamet, Tunisia) (**M. Haddad** as co-PC chair).

9.1.2.2. Member of the conference program committee (list in alphabetical order of event name)

- 9th ACM Workshop on Challenged Networks (CHANTS 2014, Maui, Hawaii, USA) (**G. Neglia**);
- 10th Advanced Intl. Conference on Telecommunications (AICT 2014, Paris, France) (**K. Avrachenkov**);
- 34th IEEE Intl. Conference on Computer Communications (IEEE INFOCOM 2015, Hong Kong) (**G. Neglia**);
- 6th IEEE Intl. Workshop on Network Science for Communication Networks (IEEE NetSciCom 2014, Toronto, Canada) (**K. Avrachenkov**, **G. Neglia**);
- IEEE Multi-Conference on Systems and Control (MSC 2014, Nice/Antibes, France) (**M. El Chamie**);
- 5th Intl. Conference on Access Networks (ACCESS 2015, Seville, Spain) (**K. Avrachenkov**);
- 8th Intl. Conference on Game Theory and Management (GTM 2014, St. Petersburg, Russia) (**E. Altman**);

- 7th Intl. Conference on Network Games, Control and Optimization (NETGCOOP 2014, Trento, Italy) (**K. Avrachenkov**, **M. Haddad**);
- 5th Intl. Conference on Next Generation Networks and Services (NGNS 2014, Casablanca, Morocco) (**M. Haddad**);
- 14th Intl. Conference on Next Generation Wired/Wireless Networking (NEW2AN 2014, St. Petersburg, Russia) (**K. Avrachenkov**);
- 8th Intl. Conference on Performance Evaluation Methodologies and Tools (VALUETOOLS 2014, Bratislava, Slovakia) (**S. Alouf**, **K. Avrachenkov**, **M. Haddad**, **G. Neglia**);
- 29th Intl. Symposium on Computer and Information Sciences (ISCIS 2014, Krakow, Poland) (**A. Jean-Marie**);
- 32nd Intl. Symposium on Computer Performance, Modeling, Measurements and Evaluation (IFIP WG 7.3 Performance 2014, Turin, Italy) (**S. Alouf**);
- 16th Intl. Symposium of Dynamic Games (ISDG 2014, Amsterdam, The Netherlands) (**E. Altman**);
- 7th Intl. Workshop on Multiple Access Communications (MACOM 2014, Halmstad, Sweden) (**K. Avrachenkov**);
- Networking and Electronic Commerce Research Conference (NAEC 2014, Trieste, Italy) (**E. Altman**);
- 1st Symposium on the Control of Network Systems (SCONES 2014, Boston, Massachusetts, USA) (**E. Altman**);
- 11th Workshop on Algorithms and Models for the Web Graph (WAW 2014, Beijing, China) (**K. Avrachenkov**);
- Workshop on Cooperative and Cognitive Networks (Nicosia, Cyprus) (**M. Haddad**);
- 16th Workshop on Mathematical Performance Modeling and Analysis (MAMA 2014, Austin, Texas, USA) (**A. Jean-Marie**, **P. Nain**).

9.1.3. Journal

9.1.3.1. Editor-in-chief

- *Performance Evaluation* (PEVA) (**P. Nain** since 1 January 2008).

9.1.3.2. Member of the editorial board (list in alphabetical order of journal name)

- *Dynamic Games and Applications* (DGAA) (**E. Altman** since 2011);
- *Elsevier Computer Communications* (COMCOM) (**G. Neglia** since 2014);
- *IEEE Transaction on Control of Networks* (TCNS) (**E. Altman** since 2013);
- *IEEE/ACM Transaction on Networking* (ToN) (**E. Altman** since 2013);
- *Journal of Economic Dynamics and Control* (JEDC) (**E. Altman** since 2001);
- *Performance Evaluation* (PEVA) (**K. Avrachenkov** since 2008).

9.1.3.3. Reviewer (list in alphabetical order of journal name)

- *Computer Communications* (COMCOM) (**S. Alouf**, **G. Neglia**);
- *Computer Networks* (COMNET) (**E. Altman**, **K. Avrachenkov**, **A. Dandoush**, **I. Dimitriou**, **G. Neglia**);
- *Elsevier Ad Hoc Networks* (ADHOC) (**G. Neglia**);
- *EURASIP Journal on Wireless Communications and Networking* (JWCN) (**M. Haddad**);
- *IEEE Communications Magazine* (COMMAG) (**M. Haddad**);
- *IEEE Journal on Selected Areas in Communications* (JSAC) (**M. Haddad**);
- *IEEE Trans. on Automatic Control* (TAC) (**G. Neglia**);
- *IEEE Trans. on Communications* (TCOM) (**M. Haddad**);

- *IEEE Trans. on Neural Networks and Learning Systems* (TNNLS) (**G. Neglia**);
- *IEEE Trans. on Parallel and Distributed Systems* (TPDS) (**G. Neglia**);
- *IEEE Trans. on Vehicular Technology* (TVT) (**M. Haddad**);
- *IEEE Trans. on Wireless Communications* (TWC) (**M. Haddad**);
- *Performance Evaluation* (PEVA) (**G. Neglia**).

9.1.4. Leadership within the scientific community

- E. Altman is a fellow member of IEEE (Class of 2010). The society of dynamic games attributes in July 2014 the Isaacs Award to E. Altman for his research on game theory. (Award attributed once every two years.)
- E. Altman, A. Jean-Marie and P. Nain are (elected) members of IFIP WG7.3 on "Computer System Modeling".
- P. Nain has been the vice-Chair of the IFIP WG7.3 working group on "Computer System Modeling" (from 30 June 2007 to 21 july 2014).

9.1.5. Research administration

E. Altman

- is co-responsible of one of the five themes of the SFR (Structure Fédérative de Recherche) AGORANTIC (in which Inria is a founding member) entitled "Digital Culture and Virtual Societies."
- is Scientific coordinator of the European project CONGAS.

K. Avrachenkov

- together with Arnaud Legout (DIANA team) and Fabien Gandon (WIMMICS team) is co-responsible of the multi-disciplinary research theme (Action Transversale) "Semantic and Complex Networks" at Inria Sophia Antipolis - Méditerranée.

A. Jean-Marie

- is the scientific coordinator of Inria activities in Montpellier (since 2008); as part of this duty, he represents Inria in the Scientific Board of the Univ. of Montpellier 2, at the Scientific Council of the Doctoral School "Sciences and Agrosciences" of the Univ. of Avignon, at the Regional Conference of Research Organisms (CODOR), at the Regional Consulting Committee for Research and Technological Development (ARAGO Committee);
- was member of the managing sub-committee of the Project-Team Committee of the Inria Sophia Antipolis – Méditerranée research center (July 2010 – August 2014);
- is a member of the Steering Committee of the GDR RO, a national research initiative on Operations Research sponsored by the CNRS;
- is president of the Technical and Industrial Orientation Council for Information Technologies (COSTI TIC) of the Transferts LR association (since 2009);
- is Head of project-team MAESTRO since October 2014.

P. Nain

- is Chairman of Inria's Evaluation Committee since 1 September 2012 (http://www.inria.fr/en/institute/organisation/committees/evaluation-committee); as part of this duty he has presided the 2014 recruitment committees for senior Inria researchers (DR2, DR1) and for junior Inria researchers (CR1).
- was Head of project-team MAESTRO (September 2003 – September 2014).

G. Neglia

- is the scientific delegate for European partnerships for Inria Sophia Antipolis – Méditerranée;

- was member of the recruitment committee for a *Maître de Conférences* position at Univ. of Avignon.

MAESTRO members are in the following committees of Inria Sophia Antipolis - Méditerranée

- CC (Comité de Centre): General Information Commission (**G. Neglia** since September 2013);
- CSD: Doctoral Committee (**S. Alouf**, since February 2006);
- NICE: Invited Researchers Committee (**K. Avrachenkov**, since 2010);

and in charge of the following tasks for the research center:

- Supervision and validation of the project-teams' yearly activity reports (**K. Avrachenkov**, since 2010);
- Accounting for the monthly Project-Team Committee meetings (**S. Alouf**, February 2012 – August 2014);
- Organizing MAESTRO internal meetings (**J. K. Sreedharan**, since November 2013).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence:

S. Alouf, "Probability", 38.5H, 1st year Water Engineering degree (L3), Univ. of Nice Sophia Antipolis (UNS), France.

M. El Chamie, "Mathematics", 18H, Miage (L3), UNS, France.

M. El Chamie, "Networks", 22H, Computer Science Program (L3), UNS, France.

M. El Chamie, "Programmation Web - Aspect Serveur", 16.5H, Computer Science Program (L1), UNS, France.

G. Neglia, "Statistics", 14H, 1st year Water Engineering degree (L3), UNS, France.

Master:

S. Alouf, "Performance Evaluation of Networks", 31.5H, M2 IFI Ubinet, UNS, France.

M. El Chamie, "Réseaux Couches Basses", 13.5H, M1 Miage, UNS, France.

M. Haddad, "Information theory", 16H, M1, Univ. of Avignon, France.

G. Neglia, "Performance Evaluation of Networks", 31.5H, M2 IFI Ubinet, UNS, France.

G. Neglia, responsible for the "Winter School on Complex Networks", 42H, M1 Computer Science, UNS, France.

Doctorat:

A. Jean-Marie, "Advanced Markov Modeling", 18H, Univ. of Montpellier 2, France.

9.2.2. Supervision

PhD:

Nicaise Choungmo Fofack, "On Models for Performance Analysis of a Core Cache Network and Power Save of a Wireless Access Network" [10], Univ. of Nice Sophia Antipolis (UNS), 21 February 2014, Advisors: Sara Alouf and Philippe Nain.

Mahmoud El Chamie, "Optimization, Control, and Game Theoretical Problems in Consensus Protocols" [11], Univ. of Nice Sophia Antipolis (UNS), 21 November 2014, Advisors: Konstantin Avrachenkov and Giovanni Neglia.

Julien Gaillard, "Recommendation Systems: Dynamic Adaptation and Argumentation", Univ. of Avignon et Pays du Vaucluse (UAPV), 10 December 2014, Advisors: Eitan Altman, Marc El-Beze and Emmanuel Ethis.

Olivia Morad, "Prefetching Control for On-Demand Contents Distribution: A Markov Decision Process Study", Univ. of Montpellier 2, 17 September 2014, Advisor: Alain Jean-Marie.

Marina Sokol, "Clustering and learning tecnhiques for traffic/user classification" [12], Univ. of Nice Sophia Antipolis (UNS), 29 April 2014, Advisors: Paulo Gonçalves (Inria project-team DANTE) and Philippe Nain.

PhD in progress:

Alberto Benegiamo, "Mathematical tools for smart grids," 1 November 2013, advisors: Patrick Loiseau (Eurecom) and Giovanni Neglia.

Ilaria Brunetti, "Cooperative and competitive content dissemination in social networks," 1 October 2012, advisor: Eitan Altman.

Arun Kadavankandy, "Random Matrix Theory and Complex Networks," 5 March 2014, advisors: Konstantin Avrachenkov and Laura Cottatellucci (Eurecom).

Jithin Kazhuthuveettil Sreedharan, "Diffusion processes in complex networks," 23 July 2013, advisor: Konstantin Avrachenkov.

Hlib Mykhailenko, "Probabilistic approaches for big data analysis," 1 May 2014, advisors: Fabrice Huet (SCALE team) and Philippe Nain.

Yonathan Portilla, "Analysis of social networks," 1 January 2012, advisor: Eitan Altman.

Alexandre Reiffers, "Modelling competition and cooperation in telecommunication networks," 15 October 2012, advisor: Eitan Altman.

Abdoulaye Tall, "Self organisation in wireless networks," 1 December 2012, advisors: Eitan Altman and Zwi Altman (Orange Labs).

9.2.3. *Juries*

MAESTRO members participated in the Habilitation (HDR) thesis committees of (in alphabetical order):

- Marceau Coupechoux: 26 May 2014, Telecom ParisTech, (**E. Altman** as examiner);

and in the Ph.D. committees of (in alphabetical order):

- Nicaise Choungmo Fofack: 21 February 2014, Inria, Sophia Antipolis (**S. Alouf** and **P. Nain** as advisors, **G. Neglia** as invited member);
- Mahmoud El Chamie: 21 November 2014, Inria, Sophia Antipolis (**K. Avrachenkov** and **G. Neglia** as advisors);
- Dariush Fooladivanda: 18 July 2014, Univ. of Waterloo (**E. Altman** as reviewer);
- Julien Gaillard: 10 December 2014, Univ. of Avignon (**E. Altman** as advisor);
- Arnob Ghosh: 16 December 2014, Univ. of Pennsylvania (**E. Altman** as examiner);
- Stefano Iellamo: 4 December 2014, Telecom ParisTech (**E. Altman** as examiner);
- Benjamin Larrousse: 11 December 2014, Univ. Paris Sud (**E. Altman** as examiner);
- Olivia Morad: 17 September 2014, Univ. of Montpellier 2 (**A. Jean-Marie** as advisor);
- Renaud Sallantin: 29 September 2014, IRIT Toulouse (**K. Avrachenkov** as reviewer);
- Tatiana Seregina: 18 November 2014, LAAS, Toulouse (**K. Avrachenkov** as reviewer);
- Marina Sokol: 29 April 2014, Inria, Sophia Antipolis (**P. Nain** as advisor);

9.3. Popularization

S. Alouf is a member of MASTIC, a commission in charge of popularization and regional and internal scientific animation (since November 2011).

9.4. Participation in scientific events

9.4.1. Keynotes, tutorials and invited talks

Maestro members gave the following keynote lectures (in alphabetical order):

- *Analysis of competition and visibility in complex networks*, at WPerformance 2014 workshop, in conjunction with the XXXIV Brazilian Conference of Computer Science (CSBC), Brasilia, Brazil, 29 July 2014 (**E. Altman**);
- *Timelines Analysis and competition over popularity, influence and visibility in social networks*, at 32nd Intl. Symposium on Computer Performance, Modeling, Measurements, and Evaluation (Performance), Turin, Italy, 9 October 2014 (**E. Altman**),

the following tutorials (in alphabetical order):

- *Introduction to Complex Networks*, at Winter School on "Complex Networks", Sophia Antipolis, 27-31 January 2014 (**G. Neglia**);
- *Network Formation Games*, at Advanced Research Center, Campione d'Italia, Italy, 8-11 September 2014 (**K. Avrachenkov**);
- *On competition in social networks*, at CEFIPRA Workshop on "New Avenues for Network Models", Bangalore, India, 13-15 January 2014 (**E. Altman**);
- *Random Walk Methods for Complex Networks*, at Winter school on "Complex Networks", Sophia Antipolis, 27-31 January 2014 (**K. Avrachenkov**);
- *Random Walk Methods for Complex Networks*, at Summer school ResCom on "Complex Networks", Corsica, 13-17 May 2014 (**K. Avrachenkov**),

and the following invited talks (in alphabetical order):

- *Analysis of competition and visibility in complex networks*, Federal Univ. of Rio de Janeiro, Brazil, 1 August 2014 (**E. Altman**);
- *Competition over visibility on Online Social Networks*, Create-Net, Italy, 15 April 2014, (**A. Reiffers**);
- *Distribution and Dependence of Extremes in Network Sampling Processes*, at Vilnius Probability Conference, Lithuania, 3 July 2014 (**K. Avrachenkov**);
- *Energy-Efficient Resource Management Games in Wireless Networks*, at CEFIPRA Workshop, IISc Bangalore, India, 15 January 2014 (**M. Haddad**);
- *Game Theory Applied to Advertising Competition in Online Social Networks*, Federal Univ. of Rio de Janeiro, Brazil, 29 August 2014 (**A. Reiffers**);
- *Graph-based Semi-supervised Methods for Community Detection*, at EURANDOM Workshop, The Netherlands, 22 January 2014 (**K. Avrachenkov**);
- *How to network in online social networks*, at IFCAM Workshop, IISc Bangalore, India, 16 January 2014 (**G. Neglia**);
- *Routing Games Applied to Online Social Networks*, Technion - Israel Institute of Technology, Israel, 10 December 2014 (**A. Reiffers**);
- *Teletraffic Engineering for Smart Grids*, Federal Univ. of Rio de Janeiro, Brazil, 23 August 2014 (**G. Neglia**);
- *Teletraffic Engineering for Smart Grids*, Univ. of Florence, Italy, 15 July 2014 (**G. Neglia**);
- *Weight Selection in Consensus Protocols*, Chalmers Univ. of Technology, 23 October 2014 (**M. El Chamie**).

9.4.2. Conferences and workshops

MAESTRO members gave presentations at the following scientific events (in alphabetical order):

- American Control Conference (ACC), 4-6 June 2014, Portland, Oregon, USA (**M. El Chamie**);
- 53rd IEEE Conference on Decision and Control (CDC), 15-17 December 2014, Los Angeles, California, USA (**M. El Chamie**, **G. Neglia**);
- 33rd IEEE Intl. Conf. on Computer Communications (INFOCOM), 27 April - 2 May 2014, Toronto, Canada (**M. Haddad**);
- IEEE Infocom Workshop on Network Science for Communication Networks (NetSciCom), 2 May 2014, Toronto, Canada (**G. Neglia**);
- IEEE Infocom Workshop on Communications and Control for Smart Energy Systems (CCSES), 28 April 2014, Toronto, Canada (**G. Neglia**);
- IEEE Intl. Conference on Communications (ICC), 10-14 June 2014, Sydney, Australia (**G. Neglia**);
- 13th IFIP Intl. Conf. on Networking (Networking), 2-4 June 2014, Trondheim, Norway (**A. Reiffers**);
- IFIP Performance, 7-9 October 2014, Turin, Italy (**M. Haddad**);
- 7th Intl. Conference on Network Games, Control and Optimization (NETGCOOP), 29-31 October 2014, Trento, Italy (**I. Brunetti**, **A. Reiffers**);
- 12th Intl. Symp. on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt), 12-16 May 2014, Hammamet, Tunisia (**E. Altman**, **M. Haddad**);
- 29th Intl. Symposium on Computer and Information Sciences (ISCIS), 27-28 October 2014, Krakow, Poland (**A. Jean-Marie**);
- 3rd Intl. Workshop on IEEE Complex Networks and their Applications, 23-27 November 2014, Marrakech, Morocco (**J. K. Sreedharan**);
- Intl. Workshop on Modeling, Analysis and Management of Social Networks and their Applications (SOCNET), 19 March 2014, Bamberg, Germany (**K. Avrachenkov**);
- Social Networking Workshop (in conjunction with COMSNETS 2014), 10 January 2014, Bangalore, India (**A. Reiffers**);
- 10ème Atelier en Evaluation de Performances (AEP), 11-13 June 2014, Sophia Antipolis (**M. El Chamie**, **J. K. Sreedharan**).

9.4.3. Schools and doctoral courses

MAESTRO members have attended the following events (list in alphanumerical order):

- Doctoral course on "Advanced Game Theory" (20H), 12-27 May 2014, Montpellier (**I. Brunetti**);
- Doctoral course on "Advanced Markov Modeling" (20H), 18-28 February 2014, Montpellier (**I. Brunetti**, **A. Reiffers**);
- EIT ICT Labs summer school on "Smart Energy" (120H), 18-29 August 2014, Stockholm (KTH Royal Institute of Technology, first week) and Karlsruhe (Karlsruhe Institute of Technology, second week) (**A. Benegiamo**);
- Grid5000 spring school 2014 (18H), 17-19 June 2014, Lyon (**H. Mykhailenko**);
- ResCom summer school on "Complex Networks" (30H), 13-17 May 2014, Corsica (**A. Kadavankandy**, **J. K. Sreedharan**);
- School on "Game Theory for Telecommunications" (56H), 8-11 September 2014, Advanced Research Center, Campione d'Italia, Italy (**V. Singh**);
- Winter School on "Complex Networks" (30H), 27-31 January 2014, Sophia Antipolis (**A. Benegiamo**, **J. K. Sreedharan**).

MUSE Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

9.1.1.1. Member of steering/executive committee

- R. Teixeira, Vice-chair of ACM SIGCOMM (since Jun. 2013).
- R. Teixeira, member of the steering committee of the ACM Internet Measurement Conference (since Nov. 2009)

9.1.2. Scientific events selection

9.1.2.1. Chair of selection committee

- R. Teixeira, Workshop co-chair of ACM SIGCOMM 2015.

9.1.2.2. Member of conference program committee

- R. Teixeira, ACM SIGCOMM 2014
- R. Teixeira, ACM SIGCOMM Poster and Demo 2014
- R. Teixeira, ACM CoNEXT 2014

9.1.3. Journal

9.1.3.1. Member of editorial board

- R. Teixeira, Editor of IEEE/ACM Transactions on Networking (since Feb. 2011)
- R. Teixeira, Area editor of ACM Sigcomm Computer Communication Review (Feb. 2010 – July 2014)

9.1.3.2. Reviewer

- A.-K. Pietilainen, ACM Transactions on Multimedia Computing; Elsevier Pervasive and Mobile Computing

9.1.4. Tutorials and invited presentations

- R. Teixeira, "Internet measurements: topology discovery and dynamics", tutorial at the Rescom summer school, Corsica, May 2014.
- A.-K. Pietilainen and R. Teixeira, "Measurements close to users", tutorial at the 4th PhD School on Traffic Monitoring and Analysis (TMA), London, April 2014.
- R. Teixeira, "Measuring Internet Experience from Home Networks", seminar at Federal University of Rio de Janeiro (UFRJ) and at Federal Univeristy of Minas Gerais (UFMG), Brazil, October 2014. Seminar at University of Washington, USA, November 2014.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Master: Renata Teixeira, "Methodology for research in networking", 21.5h eqTD, M2, UPMC, France

9.2.2. Supervision

PhD: Oana Goga, "Matching User Accounts Across Online Social Networks: Methods and Applications", EDITE, May 21, 2014, advisor: Renata Teixeira

PhD in progress:

- Sara el Aouad, "Improving the quality of recommendation using semi-structured user feedback", May 2014, advisors: C. Diot and R. Teixeira

- Diego da Hora, "Crowdsourced Home Network Diagnosis", February 2014, advisors: C. Diot and R. Teixeira

- Giuseppe Scavo, "Exploiting Network Content-awareness to provide novel added value services", November 2013 advisors: Z. Ben-Houidi and R. Teixeira

9.2.3. Juries

Renata Teixeira: member of PhD committee of Zachary Scott Bischoff (Northwestern University, 2014) and Srikanth Sundaresan (Gorgia Tech, 2014)

RAP Project-Team

7. Dissemination

7.1. Leadership within scientific community

Nicolas Broutin is member of the steering committee of the international meeting on analysis of algorithms (AofA). He has been the referee for the PhD thesis of Elie de Panafieu (Paris 7) and a member of the committee for the PhD thesis of Ross Hemsley (U de Nice).

Christine Fricker is member of the jury of agrégation. She is the leader of PGMO project "Systèmes de véhicules en libre-service: Modélisation, Analyse et Optimisation" with G-Scop (CNRS lab, Grenoble) and Ifsttar. From 1 to 3 years. Starting at 1/10/2013. *Christine Fricker* was member of Jury de recrutement de CR2 Inria-Saclay.

Philippe Robert is Associate Editor of the Book Series "Mathématiques et Applications" edited by Springer Verlag and Associate Editor of the journal "Queueing Systems, Theory and Applications". He is member of the scientific council of EURANDOM. He is also associate Professor at the École Polytechnique in the department of applied mathematics where he is in charge of lectures on mathematical modeling of networks. *Philippe Robert* has been a member of the technical programme committee of the conferences ACM Sigmetrics(2014) Performance(2014) and ICCCN (2014).

7.2. Teaching

Nicolas Broutin has taught at the Master Parisien de Recherche en Informatique (MPRI), in the course 2.15 on Analysis of Algorithms. He has also taught at NYU Shanghai during the fall of 2014.

Philippe Robert gives Master2 lectures in the laboratory of the Probability of the University of Paris VI. He is also giving lectures in the "Programme d'approfondissement de Mathématiques Appliquées et d'Informatique" on Networks and Algorithms at the École Polytechnique.

7.3. Conference and workshop committees, invited conferences

Nicolas Broutin has given lectures at the annual meeting of the GDR-IM and at the Journees de combinatoire de Bordeaux, the Workshop on New Frontriers in random geometric graphs at the Lorentz Center in Leiden. He has presented his results at seminars in Ecole Polytechnique (LIX and CMAP), Universite de Nice and at the East China Normal University in Shanghai. He has visited the mathematics department of the University of Bath and the NYU-ECNU institute for mathematical sciences at NYU Shanghai.

Sarah Eugene gave a talk at the Joint Annual Meeting of the Japanese Society for Mathematical Biology and the Society for Mathematical Biology on July 2014, Osaka, Japan.

Christine Fricker was invited at Tours University in a panel about "Trades of mathematics", 20/11/2014. She gave a talk at ECQT (1rst European Conference on Queuing Theory), Ghent, 20-22/8/2014. Participation (co-author) at Workshop CluCo d'EGC 2014, Rennes, 28/01/2014, IWCIM, Paris, 1-2/11/2014.

Philippe Robert gave a keynote conference of "European Conference on Queueing Theory", ECQT 2014, Ghent, August 2014. He gave a talk at the Lycee "Jeanne d'Albret" in Saint Germain en Laye in May, and for BTS students in April and also to maths teachers of option ISN (Informatique et sciences du numérique), académie de Versailles in April 2014.

SOCRATE Project-Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Scientific events organisation

The inauguration of the experimentation room of FIT/CortexLab took place in October 2014, see Figure 5[0], with the noticeable venue of Prof. H. Vincent Poor, Dean of School of Engineering and Applied Science of Princeton University.

9.1.1.1. general chair, scientific chair

- Samir Perlaza was a co-chair the Eight IEEE Sensor Array and Multichannel Signal Processing (SAM 2014). Special Session on Estimation in Cyber-Physical Energy Systems. June 22-25, 2014, La Coruna, Spain.

9.1.1.2. member of the conference program committee

- Florent de Dinechin was a member of the following program committees:
    - IEEE International Conference on Application-specific Systems, Architectures and Processors (ASAP)
    - IEEE International Conference on Field Programmable Logic and Applications (FPL)
    - IEEE International Conference on Field Programmable Technologies (FPT)
    - IEEE International Conference on Reconfigurable Computing and FPGAs (ReConFig)
    - International Symposium on Highly Efficient Reconfigurable Accelerator Technologies (HEART)
    - Conférence d'informatique en Parallélisme, Architecture et Système (CompAS)
- Jean-Marie Gorce was a member of the following program committees:
    - IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2014
    - IEEE International Conference on Ultra-Wideband (ICUWB) 2014
- Tanguy Risset was a member of the following program committees:
    - IEEE Computer Society Annual Symposium on VLSI (ISVLSI) 2014.
    - Design Automation and Test in Europe (DATE) 2014.
- Samir Perlaza was a member of the following program committees:
    - IEEE Global Conference on Signal and Information Processing (GLOBALSIP) 2014.
    - Conference on Decision and Game Theory for Security (GameSec) 2014.
    - International Workshop on Wireless Networks: Communication, Cooperation and Competition (WNC3) 2014.
    - IEEE INFOCOM Workshop on Communications and Control for Smart Energy Systems (CCSES) 2014.
    - IEEE ICC Workshop on Small Cell and 5G Networks (SmallNets) 2014.
    - International WDN Workshop on Cooperative and Heterogeneous Cellular Networks (WDN-CN) 2014.
- Guillaume Villemaud was a member of the following program committees:

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[0]http://www.inria.fr/centre/grenoble/actualites/inauguration-reussie-de-la-plateforme-cortexlab-equipex-fit

–   IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2014

–   International Telecommunications Symposium (ITS) 2014

9.1.1.3. member of the editorial board

-   Florent de Dinechin is an associate editor of IEEE Transactions on Computers

-   Jean-Marie Gorce is an associate editor of Telecommunications Systems (Springer) and Journal of Wireless communications and Networking (Springer).

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Tanguy Risset and Jean-Marie Gorce and are professors in the Telecommunications department of Insa Lyon.

Florent de Dinechin is professor in the Computer Science department of Insa Lyon.

Claire Goursaud is associate professor in the Telecommunications department of Insa Lyon.

Leonardo Sampaio Cardoso is associate professor at Insa Lyon (Premier Cycle).

Guillaume Salagnac and Kevin Marquet are associate professors in the Computer Science department of Insa Lyon.

Guillaume Villemaud and Florin Hutu are associate professor in the Electrical Engineering department of Insa Lyon.

Nikolai Lebedev is associate professor in the engineering school in Chemistry, Physics and Electronics, Lyon.

Tanguy Risset has been the vice-head of the Telecommunications department of Insa Lyon until september 2012.

Tanguy Risset is the responsible for the Networking program of the Master Mastria from University of Lyon.

Jean-Marie Gorce is the responsible for the Telecommunications program of the future Master EEAP from University of Lyon.

Guillaume Villemaud is responsible for international relations in the Electrical engineering département of Insa Lyon

9.2.2. Supervision

Phd: **Nicolas Brunie**: *Contributions to computer arithmetic and applications to embedded systems*, École Normale Supérieure de Lyon, Kalray CIFRE grant, 16 May 2014.

Phd: **Mickael Dardaillon**: *Compilation d'applications flot de données paramétriques pour MPSoC dédiés à la radio logicielle*, nom de l'Université, Rhones-Alpes Grant, 19 Nov. 2014.

PhD in progress **Coralie Saysset**: *Compilation de programme data-flow pour architecture multi-coeur*, nom de l'Université, MENRT, since 09/2014.

PhD in progress **Victor Quintero**: *Fundamental Limits of Decentralized Cognitive Radio Networks*, Ecole Doctoral EEA de Lyon, funded by Colciencias since 02/2014.

PhD in progress : **Arturo Jimenez Guizar**: *Cooperative communications in Body Area Networks*, ANR Cormoran grant, since 09/2012.

PhD in progress : **Matei Istoan**: *High-performance coarse operators for FPGA-based computing*, ANR Metalibm grant, since 01/2014.

PhD in progress : **Matthieu Lauzier**: "*Design and evaluation of information gathering systems for dense mobile wireless sensor networks*", CIFRE/Euromedia, since 09/2011.

PhD in progress : **Baher Mawlawi**: CEA grant, since 09/2012.

PhD in progress : **Matthieu Vallerian**: "*Radio Logicielle pour réseau de capteurs*", CIFRE/Orange, since 09/2012.

PhD in progress : **Zhaowu Zhan**: "*Full-Duplex Multimode MIMO wireless communications*", CSC/China grant with , since 9/2012.

PhD in progress **Aissa Khoumeri**: "*Study and Development of Wake-Up Radio Receivers*", FUI ECONHOME since 11/2011.

Jean-Marie Gorce is a member of the Comité National des Universités (CNU) in section 61 signal processing.

9.2.3. *Juries*

Florent de Dinechin

PhD: **Manish Kumar Jaiswal**, *Configurable Architectures for Mixed High Precision Floating Point Arithmetic*, City University, Hong Kong (as a reviewer).

PhD: **Nicolas Brunie**, *Contributions to computer arithmetic and applications to embedded systems*, École Normale Supérieure de Lyon.

PhD: **Mohamed Amine Najahi**, *Synthesis of certified programs in fixed-point arithmetic, and its application to linear algebra basic blocks*, Université de Perpignan Via Domitia (as a reviewer).

PhD: **Benoît Lopez**, *Implémentation optimale de filtre linéaire en arithmétique virgule fixe*, Université Pierre et Marie Curie, Paris.

Jean-Marie Gorce

HDR: **Jean-Yves Baudais**, *Systèmes à porteuses multiples précodés*, IETR, INSA Rennes.

HDR: **Marceau Coupechoux**, *Ingénierie des réseaux radio*, Telecom Paris Tech, Paris.

PhD: **Ramona Rosini**, *From radio channel modeling to a system level perspective in body-centric communications*, Univ. of Bologna,Italy.

PhD:, INSA Toulouse

PhD:, IETR, INSA Rennes

PhD:, Gipsa-lab Université Joseph Fourier, Grenoble

PhD: Zhaowu Zhan, INSA Lyon.

Tanguy Risset

PhD: **Mickael Dardaillon**, *Compilation d'applications flot de données paramétriques pour MPSoC dédiés à la radio logicielle*, Insa-Lyon.

PhD: **Ganda Stéphane Ouedraogo**, *Automatic Synthesis of Hardware Accelerators from High-Level Specifications of Physical Layers for Flexible*

URBANET Team

9. Dissemination

9.1. Promoting Scientific Activities

9.1.1. Administrative responsibilities

- Fabrice Valois was elected (02/2014) and nominated (09/2014) as director of the CITI research laboratory of INSA Lyon.
- Hervé Rivano is responsible with the Economic and Strategic Intelligence affairs of the CITI research laboratory, in charge with setting up ZRRs withing the lab.
- Hervé Rivano and Razvan Stanica are members in the CITI laboratory council.

9.1.2. Scientific events organization

9.1.2.1. Session chair

- Marco Fiore was a panelist at the *Complex Network Science: the next big thing* Panel at IEEE NetSciCom, May 2014.
- Marco Fiore was Session chair for two sessions at IEEE SECON 2014.
- Hervé Rivano was an invited panelist at the Labex IMU Workshop.
- Razvan Stanica was Session chair for the "Sensing, Vising and Perception VII" session at IEEE ITSC 2014.

9.1.3. Scientific events selection

9.1.3.1. Member of the conference program committee

- The Urbanet team members are/were members of the technical program committee for a number of international conferences, including IEEE SECON 2014, IEEE WoWMoM 2014/2015, IEEE Globecom 2014, IEEE ICC 2014/2015, IEEE VTC-Spring 2014, IEEE WCNC 2014, IEEE VNC 2014, WD 2014, ICCVE 2014, IEEE AINA 2014, IWCMC 2014.

9.1.4. Journal

9.1.4.1. Member of the editorial board

- Marco Fiore is member of the Technical Committee of Elsevier Computer Communications.

9.1.4.2. Reviewer

- The Urbanet team members are/were reviewers for a number of international journals, including IEEE Transactions on Mobile Computing, IEEE Communications Magazine, IEEE Transactions on Vehicular Technology, IEEE Wireless Communication Letters, Ad Hoc Networks Journal, Vehicular Communications Journal, Transportation Research Part C.

9.2. Teaching - Supervision - Juries

9.2.1. Teaching

Licence : Isabelle Augé-Blum, Operating Systems, 70h, L3, Telecom. Dpt. INSA Lyon, France.

Licence : Walid Bechkit, IP Networks, 10h, L3, Telecom. Dpt. INSA Lyon, France.

Licence : Hervé Rivano, IP Networks, 20h, L3, Telecom. Dpt. INSA Lyon, France.

Licence : Razvan Stanica, Network Programming, 90h, L3, Telecom. Dpt. INSA Lyon, France.

Licence : Razvan Stanica, Advanced Wireless Networks, 20h, L3, IST / Telecom. Dpt. INSA Lyon, France (lectures given in english).

Licence : Fabrice Valois, IP Networks, 100h, L3, Telecom. Dpt. INSA Lyon, France.

Licence : Fabrice Valois, IP Networks, 20h, L3, IST / Telecom. Dpt. INSA Lyon, France (lectures given in english).

Master : Isabelle Augé-Blum, Innovation project, 30h, M1, Telecom. Dpt. INSA Lyon, France.

Master : Isabelle Augé-Blum, Bibliographical study, 30h, M1, Telecom. Dpt. INSA Lyon, France.

Master : Isabelle Augé-Blum, Real-Time Networks, 25h, M2, Telecom. Dpt. INSA Lyon, France.

Master : Isabelle Augé-Blum, Networks of the Future, 10h, M2, University of Lyon.

Master : Walid Bechkit, Network architectures, protocols and services, 12h, M1, Telecom. Dpt. INSA Lyon, France.

Master : Walid Bechkit, Performance evaluation of telecom networks, 60h, M1, Telecom. Dpt. INSA Lyon, France.

Master : Walid Bechkit, Wireless Multihop networks, 10h, M2, University of Lyon.

Master : Razvan Stanica, Wireless local area networks, 8h, M2, University of Lyon.

Master : Razvan Stanica, Mobile Networks, 10h, M1, Telecom. Dpt. INSA Lyon, France.

Master : Fabrice Valois, Cellular Networks, 40h, M1, Telecom. Dpt. INSA Lyon, France.

Master : Fabrice Valois, Wireless Sensor Networks, 6h, M2, University of Grenoble.

Isabelle Augé-Blum is in charge of the foreign affairs of the Telecommunications department at INSA Lyon, coordinating all incoming and outgoing student exchange programs.

Razvan Stanica is responsible for the administrative part related to all Master projects prepared by INSA Lyon Telecommunications department students.

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

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 is an elected member of the Telecommunications Department Council at INSA Lyon.

9.2.2. Supervision

HdR : Hervé Rivano, Modélisation et optimisation du partage de ressources dans les réseaux radio multi-sauts, INSA Lyon, 06/2014.

HdR : Marco Fiore, Vehicular networking: from fundamental properties to network solutions, INSA Lyon, 07/2014.

PhD : Quentin Lampin, Réseaux urbains de capteurs sans fil: Applications, caractérisation et protocoles, INSA Lyon, 01/2014. Advisors: Isabelle Augé-Blum, Fabrice Valois.

PhD in progress : Soukaina Cherkaoui, Energy-saving strategies for backhaul networks, since 11/2013. Advisors: Hervé Rivano, Fabrice Valois.

PhD in progress : Jin Cui, Aggregation: From data dynamics to network dynamics, since 11/2012. Advisor: Fabrice Valois.

PhD in progress : Rodrigue Domga Komguem, Autonomous WSN architectures for road traffic applications, since 11/2012. Advisors: Fabrice Valois, Razvan Stanica, Maurice Tchuente (Univ. Yaoundé, Cameroun).

PhD in progress : Guillaume Gaillard, SLA pour réseaux de capteurs multi-services, since 12/2012. Advisor: Fabrice Valois.

PhD in progress : Trista Lin, Urban mobility measurement and citizen-oriented services cartography, since 10/2012. Advisors: Frédéric Le Mouel (CITI DynaMid), Hervé Rivano.

PhD in progress : Diala Naboulsi, Human mobility - an urban networking perspective, INSA Lyon, since 10/2012. Advisors: Razvan Stanica, Marco Fiore, Hervé Rivano.

MS thesis: P. Brunisholz, INSA Lyon, The Gain of Network Coding in Wireless Sensor Networking. Advisors: Fabrice Valois, Marine Minier (Inria Privatics).

MS thesis: A. Caballero, INSA Lyon, Collection and Analysis of Mobile Phone Data. Advisors: Razvan Stanica, Hervé Rivano.

MS thesis: R. Chaabouni, INSA Lyon, Capacity of a Bike Mobile Sensor Network. Advisor: Hervé Rivano.

MS thesis: S. Feng, INSA Lyon, GPS Data Collection using Android Smartphones. Advisors: Razvan Stanica, Hervé Rivano.

MS thesis: F. Hou, INSA Lyon, Resource Allocation in Cloud Radio Access Networks. Advisor: Razvan Stanica.

MS thesis: H. Kahoul, INSA Lyon, Autonomous RPL An IPV6 Routing Protocol For Wireless Sensor Networks. Advisor: Fabrice Valois.

MS thesis: C. Lamé, INSA Lyon, Analytical Models of IEEE 802.11 Networks. Advisor: Razvan Stanica.

MS thesis: F. Matigot, INSA Lyon, Deployment of Wireless Sensor Networks for Urban Pollution Monitoring. Advisors: Walid Bechkit, Hervé Rivano.

MS thesis: S. Mokhtari, INSA Lyon, Performance Evaluation of Line Wireless Sensor Networks. Advisors: Walid Bechkit, Hervé Rivano.

MS thesis: A. Tessilimi, INSA Lyon, Human Mobility Analysis from Call Detail Records. Advisors: Razvan Stanica, Marco Fiore.

MS thesis: M. Yu, INSA Lyon: Characterization of WSN For Traffic Flow Control. Advisor: Fabrice Valois.

9.2.3. Juries

- Marco Fiore was external reviewer of the following Ph.D. defense:
  - S. Faye, Contrôle et gestion du trafic routier urbain par un réseau de capteurs sans fil, Telecom ParisTech, 10/2014.
- Marco Fiore was external examiner of the following Ph.D. defense:
  - N. Haddadou, Réseaux ad hoc véhiculaires : vers une dissémination de données efficace, coopérative et fiable, Université Paris-Est, 06/2014.
- Marco Fiore was external examiner of the following mid-term Ph.D. defense:
  - L. Gallo, Next Generation Mobile Vehicular Networking for Public Transportation Systems, EURECOM, 10/2014.
- Hervé Rivano was external reviewer of the following Ph.D. defense:
  - A. Kodjo, Design and Optimization of Wireless Backhaul Networks, I3S, Université de Nice Sophia Antipolis, 12/2014.
- Razvan Stanica was a member of one CoS (selection committee) for an associate professor position at INSA Lyon.
- Fabrice Valois was external reviewer of the following Ph.D. defenses:
  - K. El Gholami, La Gestion de la Qualité de Service Temps-Réel dans les Réseaux de Capteurs Sans Fil, LIMOS, Université Blaise Pascal, Clermont-Ferrand (France) and STIC, Université Chouaib Doukkali, El Jadida (Maroc), 12/2014.
  - D. D. Khanh, Performance Analysis of Wireless Technologies for New Generation Avionics Embedded Systems, ISAE, Université de Toulouse, 12/2014.

- Fabrice Valois was member in the following HdR defense committee:
    - F. Theoleyre, Medium Access and Efficient Use of Multihop Wireless Networks (HDR), ICube, Université de Strasbourg, 06/2014.
- Fabrice Valois was a member of two CoS (selection committee) for associate professor positions at Telecom ParisTech and INSA Lyon.

9.3. Popularization

- Hervé Rivano gave a popularization talk for ISN teachers on smart cities and wireless networking issues in June 2014.
- Razvan Stanica gave an invited talk, titled *Data Collection and Analysis using Mobile Phone Sensors*, in the wireless sensor network training organized for industrial partners at the Ecole Polytechnique de Yaoundé in June 2014.
- Fabrice Valois gave an invited talk, titled *Introduction to Wireless Sensor Networks*, in the wireless sensor network training organized for industrial partners at the Ecole Polytechnique de Yaoundé in June 2014.