Activity Report 2011

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6. Dissemination

6.1. Animation of the scientific community

6.1.1. Program committees

- PC member for ANT-2011: 2nd Int. Conf. on Ambient Systems, Networks and Technologies, M. Banâtre.
- PC member for SAHNS 2011: Third Int. Workshop on Specialized Ad Hoc Networks and Systems, M. Banâtre.
- PC member for ruSMART 2011: The 4th conference on Smart Spaces (Aug 2011), M. Banâtre.
- PC member for the Fifth Int. Conf. on Mobile Ubiquitous Computing, Systems, Services and Technologies UBICOMM 2011, M. Banâtre.
- PC member for the 8th Int Conference on Intelligent environments - IE’12, Guanajuato, Mexico, June 2012, M. Banâtre.
- PC membre of the 14th International Symposium on Wireless Personal Multimedia Communications (WPMC’11), F. Weis.

6.1.2. Organizing and reviewing activities

Michel Banâtre is expert to the European Commission (FP7 program): reviewer member for SM4All and CONSERN projects.

6.2. Teaching

Master: Ambient Computing and Distributed Operating Systems, M. Banâtre, P. Couderc and F. Weis, 18 hours, M2, University of Rennes - DIIC 3, France
Master: Ambient Computing and Mobile Communications, M. Banâtre and F. Weis, 6 hours, M2, University of Rennes, France
Master: Distributed Systems, M. Banâtre, 18 hours, M2, Ecole des mines de Nantes, France
Master: Wireless LANs, F. Weis, 4 hours, M2, Telecom Bretagne, France
Master: Mobile communications and ambient computing, M. Banâtre, 8 hours, M2, ENSEIRB Bordeaux, France
Master: Mobile communications and ambient computing, M. Banâtre, 4 hours, M1, Ecole Centrale de Paris, France
Master: Mobile communications and ambient computing, M. Banâtre and F. Weis, 6 hours, M2, Ecole Centrale de Paris, France

PhD in progress: M. Dominici, Context Management in Smart Homes, 01/11/09, M. Banâtre and F. Weis
PhD in progress: B. Pietropaoli, Proximate interactions and data fusion in Smart Homes, 01/10/10, M. Banâtre and F. Weis
PhD in progress: Minh Ho, Indoor localization mechanisms for ambient computing systems, 01/11/08, M. Banâtre and F. Weis
PhD in progress: Arnab Sinha, Pervasive control systems for smart waste management solutions, 14/12/10, M. Banâtre and P. Couderc
ADAM Project-Team

9. Dissemination

9.1. Animation of the scientific community

9.1.1. Examination Committees

Laurence Duchien was in the examination committee of the following HDR thesis:

- François Taïani, November 2011, University of Rennes (referee),
- Laurent Réveillère, November 2011, University of Bordeaux (referee),
- Philippe Collet, December 2011, University of Nice-Sophia-Antipolis, (member).

She also was in the examination committee of the following Ph.D. thesis:

- Janick Laval, June 2011, University of Lille 1 (chair),
- Carlos Parra, March 2011, University of Lille 1 (co-advisor),
- Daniel Romero, July 2011, University of Lille 1 (co-advisor),
- Zeina Azmeh, September 2011, University of Montpellier, (member),
- Marie-Eléonore Marnion, December 2011, University of Lille 1 (chair),
- Damien Cassou, March 2011, University of Bordeaux (referee),
- Olfa Djebbi, May 2011, Université Paris I-Panthéon (referee),
- Cristobàl Costa Soria, May 2011, Universitat Politecnica de Valencia, Spain (referee),
- Abdelhakim Hannousse, November 2011, University of Nantes (referee).

Romain Rouvoy was in the examination committee of the following Ph.D. thesis:

- Christian Ruz, June 2011, University of Nice (co-referee),
- Daniel Romero, July 2011, University of Lille 1 (co-advisor),
- Grégory Nain, December 2011, University Rennes 1 (member).

Lionel Seinturier was in the examination committee of the following Ph.D. thesis:

- Daniel Romero, July 2012, University of Lille 1 (director)
- Judicael Ribault, January 2011, University of Nice (referee)
- Eric Simon, March 2011, University of Grenoble (referee)
- Yves Vanrompay, May 2011, Katholieke Universiteit Leuven, Belgium (member)
- Mohamed Zouari, June 2011, University Rennes 1 (referee)
- Loris Bouzonnet, September 2011, University of Grenoble (referee)
- Kiev Dos Santos Gama, October 2011, University of Grenoble (referee)
- Anthony Hock-Koon, October 2011, University of Nantes (referee),
- Ali Assaf, October 2011, Ecole des Mines de Nantes (member)
- Kahina Hamadach, November 2011, University of Lille 1 (president)
- Vincent Aranega, November 2011, University of Lille 1 (president)

Philippe Merle was in the examination committee of the following Ph.D. thesis:

- Virginie Legrand Contes, December 2011, University of Nice-Sophia-Antipolis, (co-advisor).
9.1.2. Journals, Conferences, Workshop

Laurence Duchien has been

- member of the following committees:
  - Program committee MAPLE/SCALE 2011, http://sites.lero.ie/maplescale2011,
- reviewer for the following journals:
  - Editorial board of the TSI (Hermes) journal,

Philippe Merle has been member of the following committees:


Lionel Seinturier has been

- guest co-editor of a special issue of the Elsevier Science of Computing journal on Software Evolution, Adaptability and Maintenance,
- member of the steering committee of the DisCoTec Workshop on Context-aware Adaptation Mechanisms for Pervasive and Ubiquitous Services,
- member of the following committees:
  - 10th ACM International Conference on Generative Programming and Component Engineering (GPCE’11),
  - IEEE International Conference on Computer, Networks, System, and Industrial Engineering (CNSI’11),
  - 3rd IEEE International Conference on Service-Oriented Computing and Applications (SOCA’11),
  - 37th Euromicro Conference on Software Engineering and Advanced Applications (SEAA’11), MOCS Track and DANCE workshop,
  - ACM International Workshop on Security and Dependability for Resource Constrained Embedded Systems (S&D4RCES’11),
  - 4th DisCoTec Workshop on Context-aware Adaptation Mechanisms for Pervasive and Ubiquitous Services (CAMPUS’11),
  - Atelier Adaptation Dynamique des Logiciels (ADAPT’11) at RenPar’20,
Romain Rouvoy has been

- member of the following committees:
  - member of the steering committee of the DisCoTec Workshop on Context-aware Adaptation Mechanisms for Pervasive and Ubiquitous Services,
  - member of the steering committee of the IFIP International Conference on Distributed Applications and Interoperable Systems,

- program co-chair of the following scientific events:
  - 10th International Workshop on Adaptive and Reflective Middleware (ARM’11),
  - 11th IFIP International Conference on Distributed Applications and Interoperable Systems (DAIS’11),

- member of the following program committees:
  - 4th DisCoTec Workshop on Context-aware Adaptation Mechanisms for Pervasive and Ubiquitous Services (CAMPUS’11),
  - 3rd International Workshop on Middleware for Pervasive Mobile and Embedded Computing (M-MPAC’11),
  - 6th International Workshop on Middleware for Service-Oriented Computing (MW4SOC’11),
  - 2nd International Workshop on Green Computing Middleware (GCM’11),
  - 6th International Workshop on Middleware Tools, Services and Run-time Support for Networked Embedded Systems (MidSens’11),
  - 1st International Workshop on Social Service Computing (SSC’11),
  - 1st International Workshop on Adaptive Services for the Future Internet (WAS4FI’11)
  - 1st International Workshop on Distributed Systems: Security, Privacy and Trust Challenges (DS:SPT’11),
  - 1st International Workshop on Middleware and Architectures for Autonomic and Sustainable (MAASC’11),
  - 1st International Workshop on Variability-intensive Systems Testing, Validation & Verification (VAST’11),


Martin Monperrus has been

- referee for the following journals: ACM TOSEM, Springer SoSym, Elsevier Science of Computer Programming
- external referee for the following conferences: AOSD, FSE
9.2. Scientific and Administrative Responsibilities

Team members have several scientific and administrative responsibilities in the university, the INRIA institute and at the national level:

- **Laurence Duchien** is in the steering committee of the ERCIM Software Evolution Group since 2006. She is Co-chair (with Jean-Louis Giavitto) of the Languages and Verification group of the GDR CNRS GPL (Génie de la Programmation et du Logiciel – [http://gdr-gpl.imag.fr](http://gdr-gpl.imag.fr)) since 2008. She will be Director of GDR GPL since January 2012. Since 2010, she is referent for the professional insertion of the PhD program in Computer Science at PRES University Lille Nord de France. In 2011, she served as a member of the Comité de sélection for recruiting professors at INSA Lyon and as chair of the Comité de sélection for recruiting professors at University Lille 1. In 2011, she served as a member of Inria Lille-Nord Europe committee for junior scientists. In 2011, she served as an expert and reviewed projects for various ICT programs: ANR ARPEGE and EGIDE PHC Barrande.

- **Lionel Seinturier** is junior member of Institut Universitaire de France since October 2011. He has been elected member of Conseil National des Universités (CNU 27, collège A) in October 2011 for a 4-year term. In 2011 he served as a member of the Prime d’Excellence Scientifique jury for the Higher Education Ministry. He is financial director of Laboratoire d’Informatique Fondamentale de Lille since October 2007. He is an elected member of the LIFL council (since 2007) and of the Lille 1 UFR IEEA council (since 2007). In 2011, he served as a member of the Comités de sélection for recruiting associate professors at University Lille 1, Institut National Polytechnique Grenoble and INSA Toulouse. In 2011, he served as a member of Inria C2D Lille committee for granting "Inria délégations". In 2011, he served as an expert and reviewed projects for various ICT programs: ANR ARPEGE, ANR MN, EGIDE COFECUB France-Brazil, DRRT Nord label Jeune Entreprise Innovante and DRRT Nord Crédit Impôt Recherche.

9.3. Supervision

The PhD Students advised by team members are listed in Table 1.

9.4. Teaching

Permanent members teach the following courses:

- **Laurence Duchien** teaches several courses on:
  - Software Product Lines, 6 H ETP, Level M2, Master of Computer Science speciality IAGL, University Lille 1, France,
  - Software Project Management, 50 HETP, Level M2, Master MIAGE, University Lille 1, France,
  - Network Computer, 37.5 H ETP, Level L3, Licence MIAGE, University Lille 1, France,
  - Object-Oriented Design, 42 H ETP, Level M2, Master of Computer Science, University Lille 1, France,
  - Research and Innovation Initiation, 17 H ETP, Level M2, Master of Computer Science, University Lille 1, France,
  - Tutoring Internship, 22 H ETP, Level M2, Master of Computer Science, University Lille 1, France.
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Start Date</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rémi Druilhe</td>
<td>Réduction de l’emprunte énergétique dans la maison numérique</td>
<td>10/2010</td>
<td>Lionel Seinturier (Dir) et Laurence Duchien</td>
</tr>
<tr>
<td>Alexandre Feugas</td>
<td>Maintien de la qualité de service au cours de l’évolution d’applications orientées services</td>
<td>10/2010</td>
<td>Laurence Duchien (Dir), Sébastien Mosser</td>
</tr>
<tr>
<td>Nicolas Haderer</td>
<td>AntDroid: Opportunistic Mobile Sensing of User Activities</td>
<td>09/2010</td>
<td>Lionel Seinturier (Dir) et Romain Rouvoy</td>
</tr>
<tr>
<td>Jonathan Labéjof</td>
<td>Evolution des architectures orientées service hétérogènes</td>
<td>11/2009</td>
<td>Lionel Seinturier (Dir), Philippe Merle</td>
</tr>
<tr>
<td>Matias Martinez</td>
<td>Automated Program Repair at Development and Runtime</td>
<td>10/2011</td>
<td>Laurence Duchien (Dir), Martin Monperrus</td>
</tr>
<tr>
<td>Rémi Mélisson</td>
<td>Set Tob Box virtualization in a Software Defined Network context</td>
<td>10/2010</td>
<td>Laurence Duchien (Dir), Romain Rouvoy</td>
</tr>
<tr>
<td>Adel Noureddine</td>
<td>Software Engineering for Green Autonomic Systems</td>
<td>11/2010</td>
<td>Lionel Seinturier (Dir) et Romain Rouvoy</td>
</tr>
<tr>
<td>Russel Nzekwa</td>
<td>Building Feedback Control Loops for Self-Adaptive Very-Large-Scale Environments</td>
<td>10/2009</td>
<td>Lionel Seinturier (Dir) et Romain Rouvoy</td>
</tr>
<tr>
<td>Fawaz Fernand Paraïso</td>
<td>Interopérabilité des environnements middleware de cloud computing</td>
<td>10/2011</td>
<td>Lionel Seinturier (Dir), Philippe Merle</td>
</tr>
<tr>
<td>Clément Quinton</td>
<td>Migration d’applications dans les environnements middleware de cloud computing</td>
<td>10/2011</td>
<td>Laurence Duchien (Dir), Lionel Seinturier</td>
</tr>
<tr>
<td>Gabriel Tamura</td>
<td>QoS-CARE: A Reliable System for Preserving QoS Contracts through Dynamic Reconfiguration</td>
<td>10/2009</td>
<td>Laurence Duchien (Dir), Rubby Casallas</td>
</tr>
</tbody>
</table>
She heads the research program in Master of Computer Science at University Lille 1 (http://www.fil.univ-lille1.fr/portal/index.php?dipl=MInfo&sem=RIC&ue=ACCUEIL). She is referent for the professional insertion in the PhD program in Computer Science at PRES University Lille Nord de France.

- **Lionel Seinturier** heads the E-Service specialty of the Master of Computer Science at the University Lille 1. He teaches several courses on middleware, component-based software engineering, aspect-oriented programming, and object-oriented design in Master of Computer Science at the University Lille 1:
  - Conception d’applications réparties, 18h, M1, University Lille 1, France
  - Infrastructures et frameworks Internet, 6h, M2, University Lille 1, France

- **Romain Rouvoy** supervises the Agil-IT Junior Enterprise (http://agil-it.fr) and teaches at University Lille 1:
  - Mise à niveau Web, 25h ETP, Level L3, Master of Computer Science speciality MIAGE, UFR IEEA, University Lille 1, France,
  - Technologies Web, 20h ETP, Level L3, Master of Computer Science speciality MIAGE, UFR IEEA, University Lille 1, France,
  - Conception d’Applications Réparties, 18h ETP, Level M1, Master of Computer Science, UFR IEEA, University Lille 1, France,
  - Qualité du Logiciel, 30h ETP, Level M2, Master of Computer Science speciality MIAGE, UFR IEEA, University Lille 1, France,
  - Infrastructures et Frameworks Internet, 23h ETP, Level M2, Master of Computer Science speciality IAGL, UFR IEEA, University Lille 1, France,
  - Innovation & Initiation à la Recherche, 14h ETP, Level M2, Master of Computer Science speciality IPI-NT, UFR IEEA, University Lille 1, France,
  - Intergiels Orienté Services, 50h ETP, Level M2, Master of Computer Science speciality IAGL, UFR IEEA, University Lille 1, France,
  - Suivi de projets, 60h ETP, Level M2, Master of Computer Science, UFR IEEA, University Lille 1, France,
  - Suivi d’alternants, 60h ETP, Level M2, Master of Computer Science, UFR IEEA, University Lille 1, France.

- **Martin Monperrus** teaches at the University Lille undergraduate and graduate courses. In particular:
  - Introduction to programming, 48h, L1, University Lille 1, France
  - Object-oriented design, 39h, L3, University Lille 1, France
  - Automated software engineering, 28h, L3, University Lille 1, France

### 9.5. Miscellaneous

- The team has organized the 3rd “Journées du GDR CNRS GPL”\(^2\). The event gathered 226 participants from June 7 to June 20, 2011.
- The team has organized its internal seminar in Mombreux from August 31 to September 2, 2011.
- The team has participated to RIC (Research, Innovation, Creation) Day , Lille, October 2011\(^3\).

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\(^2\)[http://www.lifl.fr/idm-gpl](http://www.lifl.fr/idm-gpl)
AMAZONES Team

9. Dissemination

9.1. Animation of the Scientific Community

9.1.1. Participation in Committees

Frédéric Le Mouël is elected expert for faculty hiring committee (computer science section, 27e section) in INSA Lyon. Stéphane Grumbach is a PC member of DASFAA’11, DEXA’11, WRIPE’11, OSSC’11, Sensorcom’11, SKG’11.

9.1.2. Editorial Boards

9.1.2.1. Technique et Sciences Informatiques Journal
Participant: Antoine Fraboulet.

Multidisciplinary journal designed to provide a synthesis tool for French researchers and industrial in computer science. http://tsi.revuesonline.com/

9.1.3. Conferences and workshop organization

9.1.3.1. fOSSa 2011
Participant: Julien Ponge [Steering committee, Program committee].

fOSSa 2011 was organized by INRIA, INSA de Lyon, the CITI laboratory, the IRILL laboratory and Engineering Group Italia. The conference gathers a unique blend of opensource actors, including academics, educators, associations and industrials. The 2011 edition comprised tracks on: education, community management, development, openness and new trends in opensource.

http://fossa.inria.fr/

9.1.3.2. EuroSys 2010 Conference
Participant: Frédéric Le Mouël [Webmaster co-chair].

EuroSys 2010 is organised by EuroSys, the European Chapter of SIGOPS, sponsored by ACM SIGOPS.
The EuroSys conference series brings together professionals from academia and industry. It has a strong focus on systems research and development: operating systems, data base systems, real-time systems and middleware for networked, distributed, parallel, or embedded computing systems. As a highly recognized conference - rank 11 out of 581 in terms of 2007 CiteSeer impact factor - EuroSys has become a premier forum for discussing various issues of systems software research and development, including implications related to hardware and applications.


9.1.3.3. SEmba Workshop (2009, 2010 and 2011)
Participant: Nicolas Stouls [Program Chair].

In the context of the SEmba project (introduced Section 8.2.1 ), the SEmba workshop is an annual meeting where all participant of the project are invited to present there recent works. The two days are organized in four sessions corresponding to the three themes of the project and to an opening to work in the scope, but realized out of the region. This workshop meet 40 participants in 2009, 60 participants in 2010 and 70 participants in 2011, coming from all over the region.

Here is a link to the Workshop Program.
9.1.4. Program committees

Stéphane Frénot has participated to the following conference program committees: NOMS’2012. He has chaired the mini-conf on Management Strategies at CNSM’2011.

Frédéric Le Mouël has participated to the following conference program committees: INFORSID’2011, PECCS’2011, UIC’2010, UBICOMM’2010; has been workshop chairman at: ERTSI’2010; has participated to the following workshop program committee: OTM Academy’2010.

Julien Ponge has participated to the ICSOC’2011 TPC. He has chaired the fOSSa 2011 DEV track.

9.2. Teaching

All Amazones team member are associate professor at INSA Lyon. We teach both at the Telecommunications and the Information Technology department, at the First Cycle department and at the RTS Master of INSA Lyon. We make external courses at ENSEIRB in Bordeaux and in the University of Lebanon. Our course material cover Operating Systems, Algorithmics and C programming, Hardware architectures, Java and OSGi programming, Middleware, Software Design.

9.3. Theses and Internships

9.3.1. Theses

9.3.1.1. Theses in preparation

Rolcha Goya "Operating system for handling IoT", Iranian Grant, since 10/2011, 1st year.

Manuel Selva "Real time SOA", Bull SA Grant, since 10/2011, 1st year.


Zheng Hu "Legacy equipment management in home environment", Orange labs grant, since 01/2010, 2nd year.

Yufang Dan "Ambient calculus for distributed, service oriented virtual machines", CSC china grant, since 09/2010, 2nd year.


Ahmad Ahmad-Kassem "High level abstraction for network programming", ANR-09-BLAN-0131-01 grant, since 10/2009, 3rd year.

Fuda Ma "High level modeling for applications distributed over networks", CSC china grant, since 09/2010, 2nd year.

9.3.2. Participation in thesis comittees

Stéphane Frénothas has been member of the PhD Jury of Mr. Juan Navas, "Une infrastructure pour l’optimisation de systèmes embarqués volutifs à base de composants logiciels", University of Britany, 6 may, 2011.

9.3.3. Internships

Alexis Giorkallos "Compressing/Cyphering logs" (French Report).

Damien Reimert "Ambiant Context Simulation” (French Report).

Moemen Cherni "Dynamic temporal specification building for service oriented application admission control“ (French Report).

Yann Chevalier "Memory management in JamVM” (French Report).

Ferit Baver Elhuseyni "A Cross-layer Approach to Achieve Efficient Service Delivery in Mobile Delay-Tolerant Networks with a Service-Oriented Network Coding”.

Herman Mekontso Tchinda "Specification and Service Substitution within OSGi framework" [14].

Joffrey d’Hayer “Implementing Hashing function on Lyrec FGPA card” (French Document)
8. Dissemination

8.1. Involvement within the Scientific Community

8.1.1. Programme Committees of Conferences and Workshops

- Nelly Bencomo is PC member of the following international conferences: SEAMS ’11 & ’12, SBES ’11, MODELS ’12, CibSE ’12, Poster track at RE ’11 & ’12;
- Nelly Bencomo is PC member of the following international workshops: MAPLE ’10 at SPLC ’10, WCSI ’10, SOAR ’11, MoDRE ’11 at MODELS ’11, VAST ’11 UsARE ’12 at ICSE ’12;
- Nikolaos Georgantas is PC member of the ICSoft ’11, Aml ’11, NAS ’11 international conferences, and the CFSE ’11 national conference;
- Nikolaos Georgantas is PC member of the M-MPAC ’11, MW4SOC ’11, QASBA ’11, MAASC ’11 international workshops, and the ICSoC ’11 PhD Symposium;
- Valérie Issarny is PC member of the following international conferences: COMSWaRE ’11, ESEC/FSE ’11, ESSOS’12, FASE ’11 & ’13, FMOODS ’11, ICDCS ’11, ICSE ’13, ICSOC ’11, IFIPTM ’11, ISARCS ’11 & ’12, Middleware ’11, SEAMS ’11 ServiceWave ’11, Mobile track at ESWC ’11, Demonstration track at ICSE ’11, NIER Track at ICSE ’12;
- Valérie Issarny is PC member of the following international workshops: ESWC ’11, EternalS ’11, MW4SOC ’11, Serene ’11, SESENA ’11;
- Animesh Pathak is PC member of ISSNIP ’11, S-Cube ’11 & ’12, and SECON ’11 international conferences; and
- Animesh Pathak is PC member of SESENA ’12 and NPC ’12 international workshops.

8.1.2. Leadership Services in Academic Events and Edited Journals

- Nelly Bencomo is Student Volunteers Co-Chair at ICSE 2012;
- Nikolaos Georgantas is associate editor of the International Journal of Ambient Computing and Intelligence (IJACI);
- Valérie Issarny is member of the Steering Committee of the Middleware and ESEC/FSE conferences;
- Valérie Issarny was associate editor the of ACM Computing Surveys till September 2011;
- Valérie Issarny is associate editor the Springer JISA Journal of Internet Services and Applications;
- Valérie Issarny is co-chair of the Future of Middleware event, co-located with Middleware ’11, 13 December 2011 in Lisbon, Portugal;
- Valérie Issarny is co-chair of SFM-CONNECT: The 11th International School on Formal Methods for the Design of Computer, Communication and Software Systems: Connectors for Eternal Networked Software Systems, on 13-18 June, 2011 in Bertinoro; and
- Animesh Pathak is the Production Chair of HiPC 2011 & 2012.

8.1.3. Other Academic Services

- Nikolaos Georgantas is member of the PhD monitoring committee at Inria Paris-Rocquencourt;
- Nikolaos Georgantas is member of the organizing committee of the monthly colloquium at Inria Paris-Rocquencourt;
• Valérie Issarny is coordinator of the EC FP7 FET IP CONNECT;
• Valérie Issarny is scientific leader of the EC FP7 IP CHOREOS;
• Valérie Issarny is expert for the EC FP7 ICT work programme, and ARTEMIS Joint Undertaking;
• Valérie Issarny is member of the INRETS scientific council (IFSTTAR since 2011) & “Commission d’évaluation des chercheurs”;
• Valérie Issarny is member of the GDR GPL scientific council; and
• Valérie Issarny is member of the evaluation committee of the ANR “Programme Blanc” and “Programme Jeunes Chercheuses et Jeunes Chercheurs” for the 2011 & 2012 call.

8.2. Teaching

• Valérie Issarny gives a 12 hours lecture on “Pervasive Service Oriented Computing” as part of the SWAS lecture of the Master 2 COSY of the University of Versailles Saint-Quentin en Yvelines;
• Valérie gave a lecture "Revisiting the Middleware Paradigm to Meet the Challenge of Interoperability in Pervasive Networks" at The workshop on Ubiquitous Computing Middleware 2011 (UCM 2011), 27 - 28 of June 2011 at the Department of Informatics of the University of Fribourg, Switzerland;
• Valérie Issarny gave a lecture on "Model-based Emergent Middleware to Meet the Challenges of Interoperability in Pervasive Networks" at ESEC/FSE’11 Tech Briefings, 6 September 2011, in Szeged, Hungary;
• Valérie Issarny gave a lecture on "Towards Future Proof Interoperability" at the SERENE’2011 Autumn School, 27-28 September 2011 in Geneva, Switzerland;
• Animesh Pathak co-taught a Master’s level course on “Web sémantique, contenus et usages” at University of Versailles Saint-Quentin-en-Yvelines in Spring 2011; and
• Animesh Pathak gave two three-hour guest lectures at CNAM, Paris as part of a Master-level course.

8.3. PhD

The following PhD theses are currently in progress at the ARLES project-team:

• Dionysis Athanasopoulos, “Evolution and Maintenance in Service-oriented Software”, started October 2008, advised by Apostolos Zarras and Valérie Issarny
• Nebil Ben Mabrouk, “QoS Service Oriented Middleware for Pervasive environments”, started October 2007, advised by Nikolaos Georgantas and Valérie Issarny
• Amel Bennaceur, “Synthèse dynamique de connecteurs pour les réseaux ubiquitaires”, started October 2009, advised by Valérie Issarny
• Sara Hachem, “Middleware pour l’Internet des objets intelligents”, started October 2012, advised by Valérie Issarny
• Amir Seyedi, “Impact of Social Networks on Middleware for Mobile Environment”, started December 2009, advised by Animesh Pathak and Valérie Issarny.
8.4. Internships

During the year 2011, members of the ARLES project-team supervised the work of the following student interns:

- Benjamin BILLET, *En quoi les architectures logicielles et intégricielles peuvent-elles simplifier le processus de développement et d’évolution des applications multi-plateformes?,* EPSI, Montpellier, France.
- Ajay CHHATWAL, *Supporting application development for Future Internet of smart things and services*, Integrated M.Tech Dual-degree program, Institute of Technology, Banaras Hindu University, India.
- Fatma GHACHEM, *Développer et intégrer de nouveaux services d’infrastructure pour faciliter les interactions entre les terminaux mobiles*, M2, ESPRIT Ecole Supérieure Privée D’Ingénerie et de Technologie, Tunisia.
- Mahesh GONDI, *Middleware support for managing social data in smart urban environments*, Bachelor of Technology, Institute of Technology, Banaras Hindu University, India.
- Shashank KHARE, *Realization of a generic trust simulator for distributed systems*, Integrated M.Tech Dual-degree program, Institute of Technology, Banaras Hindu University, India.
- Shashank TYAGI, *Ontology based interoperability of instant messaging applications*, Integrated M.Tech Dual-degree program, Institute of Technology, Banaras Hindu University, India.
- Valentin VILLANOVA, *Ergonomie des services coopératifs mobiles*, IUT Cergy-Pontoise, France.
9. Dissemination

9.1. Animation of the scientific community

9.1.1. Awards not including best papers.

A.-M. Kermarrec received the Monpetit Award from the French Academy of Science in 2011.

9.1.2. Editorial activity, committees, event organization.

A.-M. Kermarrec was an elected member of the INRIA Evaluation Committee until September 2011. She has been a member of the “bureau du CP” since November 2009.

Anne-Marie Kermarrec has been a member of the scientific board of SPECIF (Société des Personnels Enseignants et Chercheurs en Informatique de France) since October 2011.

A.-M. Kermarrec is a nominated member of the ACM Software System Award Committee since October 2009 and the chair of the committee since October 2011.

A.-M. Kermarrec and François Taiani organized the second GOSSPLE workshop in December 2011.

A.-M. Kermarrec was co-chair of the program committee of the ACM/IFIP/USENIX International Middleware Conference, Lisbon, December 2001.

A.-M. Kermarrec served in the steering committee of the Eurosyst Social Network Systems (SNS), and is a member of the steering committee of the Winter School Hot topics in distributed computing.

A.-M. Kermarrec is a member of the IEEE Internet Computing Editorial Board.

A.-M. Kermarrec served in the program committees for the following conferences:


EDBT 2011 (Demo): International Conference on Extending Database Technology (Demo track), Uppsala, Sweden, March 2011.


IPDPS 2012: International Parallel & Distributed Processing Symposium, Shanghai, China, May 2012.


ICDCS 2012: International Conference on Distributed Computing, Macau, China, June 2012.


VLDB 2012 (Demo): International Conference on Very Large Data Bases (Demo track), Istanbul, Turkey, August 2012.
A. Mostefaoui served in the program committees for the following conferences:


F. Taiani has served on the program committees of the following events.

LADC 2011 1st Workshop on Exception Handling in Contemporary Software Systems (EHCoS’11), held in conjunction with the 5th Latin-American Symposium on Dependable Computing.
GCM 2011 2nd International Workshop on Green Computing Middleware (GCM’2011), held in conjunction with the ACM/IFIP/USENIX 12th International Middleware Conference.
ARM 2011 10th International Workshop on Adaptive and Reflective Middleware (ARM’11), held in conjunction with the ACM/IFIP/USENIX 12th International Middleware Conference.
MW4SOC 2011 6th Workshop on Middleware for Service Oriented Computing (MW4SOC’11), held in conjunction with the ACM/IFIP/USENIX 12th International Middleware Conference.
M-MPAC 2011 3rd International Workshop on Middleware for Pervasive Mobile and Embedded Computing (M-MPAC 2011), held in conjunction with the ACM/IFIP/USENIX 12th International Middleware Conference.
C4E 2011 Workshop on Clouds for Enterprises 2011 (C4E 2011) held in conjunction with 13th IEEE Conference on Commerce and Enterprise Computing (CEC’11)
WASA-NGI-IV 2011 4th Int. Workshop on Architectures, Services, and Applications for the Next Generation Internet (WASA-NGI-IV), held in conjunction with the IEEE Local Computer Networks (LCN) conference
Middleware 2011 12th ACM/IFIP/USENIX International Middleware Conference 2011
DSN 2011 The 41th Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2011)
DAIS 2011 11th Int. IFIP Conference on Distributed Applications and Interoperable Systems (DAIS’11)
EWDC 2011 13th European Workshop on Dependable Computing Special theme: Resilience of Evolving Software Systems (EWDC)

F. Taiani organized the 1st Workshop on Middleware and Architectures for Autonomic and Sustainable Computing (MAASC), held in conjunction with the 11ème édition de la Conférence Internationale sur les NOuvelles Technologies de la RÉpartition (NOTERE)

M. Bertier served in the program committees of CFSE 2011 The 8th Conférence Française en Système d’Exploitation, mai 2011, Saint Malo, France.
He also is a member of the organizing committee of CFSE 2011 and RENPAR 2011
D. Frey served in the program committees of the following conferences


He also served as a referee for the following journals

- IEEE Transactions on Parallel and Distributed Systems.

S. Weiss was a referee for the Journal of Parallel and Distributed Computing (JPDC).

A. Boutet has been a member of the “Commission de formation” of INRIA Rennes since 2011.

9.1.3. Invited talks and seminars.

**Anne-Marie Kermarrec** was invited to give a seminar at EPFL, Switzerland, June 2011.

**Anne-Marie Kermarrec** was invited to give a talk at the Workshop on Social network, in conjunction with DISC, Roma, September 2011.

**Anne-Marie Kermarrec** was invited to give a seminar at the University of Pisa, September 2011.

**Anne-Marie Kermarrec** was invited to give a seminar University of Santa Barbara (UCSB), Technicolor Labs (Palo Alto), Facebook (Palo Alto) and University of San Diego (UCSD), USA, August 2011.

**Anne-Marie Kermarrec** was invited to give a technical seminar at Google Zurich in November 201.

**Marin Bertier** was invited to give a talk at "Journée PucesCom", Rennes, June 2011.

**François Taiani** was invited to deliver a 6-hour lecture on "Cloud Computing in the biogeosciences” at the 2nd Summer School on Biogeodynamics and Earth System Sciences (BESS) organized by Istituto Veneto di Scienze, Lettere ed Arti, the University of Padua and the Natural Environment Science Research Council (NERC, UK) in Venice, Italy, in June 10-17.

**Armando Castañeda** was invited to give a talk at Workshop on Theoretical Computer Science, Mexico, 18/11/2011.

9.2. Teaching

Master: **Anne-Marie Kermarrec**, P2P Systems and Applications, 15h, M2, Université de Rennes 1, France.

Master: **Anne-Marie Kermarrec**, Gossip-based computing, 5 hours, M2, University of San Sebastian, Spain.

Master: **Michel Raynal**: Distributed Algorithms and Computability, 20h, Université de Rennes 1, France.

Master: **Michel Raynal**: Introduction to Distributed Algorithms 10h, Université de Rennes 1, France.

Master: **Michel Raynal**: Advanced Synchronization, 14h, Université de Rennes 1, France.

Master: **Marin Bertier**, Algorithmique distribuée, 16h, niveau M2, INSA de Rennes, France.

Master: **Marin Bertier**, Système d’exploitation, 56h, niveau M1, INSA de Rennes, France.

Master: **Marin Bertier**, Parallélisme, 20h, niveau M1, INSA de Rennes, France.


Licence: **Marin Bertier**, Unix, 20h, niveau L3, INSA de Rennes, France.

Licence: **Marin Bertier**, Programmation Scheme, 36h, niveau L1, INSA de Rennes, France.
Licence: Damien Imbs, computer literacy classes, 64h, first year, university of Rennes 1.
Licence: Damien Imbs, Systems and networks 1, 8h, third year, university of Rennes 1.
Master: Damien Imbs, Operating systems, 36h, first year, university of Rennes 1.
Licence: Stéphane Weiss, Bureautique, 26,67h, niveau L1, Université de Rennes 1, France.
Licence: Stéphane Weiss, Systèmes et Réseaux: Systèmes, 98h, niveau L3, ISTIC Université de Rennes 1, France.
Licence: Stéphane Weiss, Programmation Web, 18,67h, niveau L3, ISTIC Université de Rennes 1, France.

Anne-Marie Kermarrec gave a talk at the Spring School on Distribute Computing, Marrakesh, May 2011.

9.2.1. PhD & HdR

ASCOLA Project-Team

9. Dissemination

9.1. Animation of the Community

9.1.1. Animation

9.1.1.1. International

Aspect-oriented Software Association (AOSA): Mario Südholt has been elected the chair of this international organization (headquartered in California) in Apr. 2011.

COST Action: Jean-Marc Menaud is a management committee member of the European COST Action IC0804: Energy efficiency in large scale distributed systems from 2009 to 2013.

DSAL: Jacques Noyé has co-organized the 6th international workshop on “Domain-Specific Aspect Languages” (DSAL 2011) co-located with AOSD 2011 in Porto de Galinhas, Pernambuco, Brazil.

VTDC: Adrien Lèbre has been the general chair of the 5th international workshop on “Virtualization Technologies in Distributed Computing” (VTDC 2011) co-located with HPDC 2011 in San José, CA, United-States.


OW2: Jean-Marc Menaud has been a member of the OW2 board committee since 2010.

9.1.1.2. France

CNRS GDR GPL: Pierre Cointe is a member of the scientific committee of the GDR GPL (Génie de la Programmation et du Logiciel).

CNRS GDR ASR: Jean-Marc Menaud is a member of the scientific committee of the CNRS GDR ASR (Architectures, Systèmes, Réseaux) and in charge of the System action.

ACM/SIGOPS: Jean-Marc Menaud was the vice-chair of the French ACM/SIGOPS Chapter (ASF) from Mar. 2008 to Mar. 2011.

COMIN Labs laboratory of Excellence: Jean-Marc Menaud has been the co-coordinator of the focus on Energy and resource efficiency in ICT since Jun. 2011. Mario Südholt has been co-coordinating the Security focus of COMIN Labs.


France Grille: Adrien Lèbre gave a lecture at the Cloud Computing days organized by France Grille in Lyon, France, Oct. 21, 2011.


9.1.1.3. PdL Region

Quartier de la création de Nantes: Pierre Cointe organized with Bertrand Stiegler (Ars Industrialis) a workshop on Web Sciences and Software Studies (May 27, 2011).

Regional Doctoral School STIM: Thomas Ledoux co-organized JDOC, an event promoting contact between PhD students of the Doctoral School (Apr. 14, 2011), and the Welcome Day event for all the new PhD students (Nov. 3, 2011).
9.1.2. Steering, Journal, Conference Committees

**P. Cointe** is a member of AITO and the ECOOP steering committee. He was a member of the NOTERE 2011 program committee.

**A. Lèbre** was a member of the program committee of the 11th IEEE International Conference on Scalable Computing and Communications (ScalCom 2011), the IEEE International Conference on Cloud and Green Computing (CGC 2011), the 20th EUROMICRO Conference on Parallel, Distributed and Network-based and Processing (special session on Cloud Computing), the 5th Workshop on System-level Virtualization for High Performance Computing (HPCVirt 2011, co-located with the EUROPAR conference), and the 4th IEEE Workshop on Real-Time Service Oriented Architecture and Applications (RTSOAA 2011, co-located with SOCA 2011).

**T. Ledoux** was a member of program committees for the following conferences: 2nd International Workshop on Green Computing Middleware (GCM’11), 10th International Workshop on Adaptive and Reflective Middleware (ARM’11), 1st Workshop on Middleware and Architectures for Autonomic and Sustainable Computing (MAASC’11), International Conference on Green Computing ICGreen 2011, International Conference on ICT as Key Technology against Global Warming (ICT-GLOW’11). He was also a member of the program committee for the book “Achieving Federated and Self-Manageable Cloud Infrastructures: Theory and Practice” (IGI Global, 2012).

**J.-M. Menaud** is a member of the (RenPar/CFSE/Sympa) steering committees. He has served on the program committee of the IEEE/ACM Inter. Conference on Green Computing and Communications (GreenCom2011), the first International Workshop on Autonomic Systems enabling Green Computing (ASGC 2011) as part of The Tenth International Conference on Networks (ICN 2011), the first International Conference on Smart Grids, Green Communications and IT Energy-aware Technologies (ENERGY 2011), the first International Conference on ICT as Key Technology for the Fight against Global Warming (IT-GloW ’11), the 6th Workshop on Virtualization in High-Performance Cluster and Grid Computing (VHPC ’11) as part of Euro-Par 2011 and the 5th Workshop on System-level Virtualization for High Performance Computing (HPCVirt 2011) as part of EuroSys 2011.

**J.-C. Royer** is a member of the editorial board of the journal TSI. He was a member of the program committee of CAL 2011, CNSI 2011 and SSNE 2011.

**M. Südholt** is a member of the steering committees of the international conferences AOSD and Software composition. He is also a member of the editorial board of the international journal “Transactions of AOSD”, which is published by Springer Verlag.

**N. Tabareau** was a member of the program committee of the workshop LOLA (Syntax and Semantics of Low-Level Languages) 2011, satellite of LICS 2011.

9.1.3. Thesis Committees

**P. Cointe** was a reviewer of Julien Mercadel’s PhD (University of Bordeaux, Oct. 10).

**T. Ledoux** has taken part in two PhD evaluation committees: Roméo Said (UBS, 23 Feb.), Loris Bouzonnet (LIG-IMAG, 16 Sep.)

**A. Lèbre** was member of two PhD committees: Jérôme Gallard (Rennes, 6 May) and Alexandra CARPEN AMARIE (Rennes, 15 Dec.).

**J.-M. Menaud** was reviewer of one PhD: Alain-B. TCHANA (Oct. 29, 2011) in Toulouse.

**J.-C. Royer** was reviewer of three PhDs: Mario Sanchez Puccini in Bogota, Anthony Hock-Koon in Nantes, Carlos Parra in Lille and member of Angel Núñez’s PhD committee.

**M. Südholt** has served as a reporting jury member for the PhD of Slim Kallel (TU Darmstadt, Germany, and ENIS, Sfax, Tunisia) in May 2011.
9.1.4. Evaluation Committees and Expertise

**P. Cointe** was a member of the AERES visiting committee for MIPS (Mulhouse, Nov. 15-16, 2011). He served in four selection/hiring committees (EMN, Polytech’Nantes and University of Nantes) for associate and full professor positions.

**J.-M. Menaud** acted as an expert for the ANR International White Program 2011 call.

**J-C. Royer** acted as an expert for the ANR blanc SIMI 2 2011 call.

**M. Südholt** has served as an expert to the Cofecub French-Brazilian exchange program.

**N. Tabareau** was a member of the selecting committee for the position of assistant professor (MC298) at École Normale Supérieure (ENS) de Cachan, Ker Lann and assistant professor (MC04867) at Laboratoire Informatique de Nantes Atlantique (LINA).

9.2. Collective Duties

**P. Cointe:** He is the head of the LINA computer science laboratory (UMR 6241) [http://www.lina.univ-nantes.fr/](http://www.lina.univ-nantes.fr/). As such he was involved in the CominLabs (labex) proposal.

He is a member of the board of the Doctoral School MATISSE in Rennes as well as the selection and evaluation committee and the board of the cluster Images & Réseaux. He is the chair of the STIC-MATHS committee working for the Pays de la Loire Council (CCRRDT) and the PRES L’UNAM.

**T. Ledoux:** He is a member of the board of the Regional Doctoral School STIM. He is a member of the board of the Follow-up committee of the PhD theses at LINA. He is a member of the administrative committee of the INRIA Rennes-Bretagne Atlantique. Finally, he is the Apprenticeship program manager in Software engineering at Ecole des Mines de Nantes.

**J.-M. Menaud** is the deputy of the computer science department at Ecole des Mines de Nantes, in charge of the scholarship program.

**M. Südholt:** is a member of the council of the Laboratoire Informatique de Nantes Atlantique (LINA, UMR 6241). He also serves on the selection and evaluation committee of the competitiveness cluster Images & Réseaux. Finally, he is a member of the governing board of AOSD-Europe, the European Network of Excellence in AOSD.

**A. Lèbre** is involved in the direction committee of the Grid’5000/Aladdin platform. In addition, He is in charge of the Virtualization working group since 2008.

9.3. Teaching

9.3.1. Steering and Main Lecturing Activities

Members of the team has been responsible for or contributing to the following main study programs:

- The team is a main contributor (of approx. 1000 hours in 2010-2011) to the informatics education (2600 hours in total) within the four-year engineering program at École des Mines de Nantes. The team is steering, chairing and the main contributor to a fourth-year informatics specialization for a total teaching volume of 800 hours of which Ascola is contributing 210 hours.

- The team has designed and set up a three-year Apprenticeship engineering program for a total teaching volume of 1800 hours (816 in informatics). The first year of the formation started in Oct. 2011; Ascola is contributing 95 hours in 2011-2012.

- The team is steering and teaching a 48-hour module on AOSD in an MSc program that is organized jointly by University of Nantes and École des Mines de Nantes.

- Members of the team have taught different courses at different study levels in Rennes that are mainly organized by University of Rennes and the research institutes Irisa and Inria.
9.3.2. Habilitations (HdR) and PhD Supervision

Jean-Marc Menaud has defended his habilitation (HDR, Habilitation à Diriger des Recherches) on Jun. 22, 2011 [13].

This year 5 PhD theses have been defended by students of the ASCOLA team:

• Hien Nguyen Van [15]
• Angel Núñez [16]
• Abdelhakim Hannousse [12]
• Dong Ha Nguyen [14]
• Ali Assaf [11]
9. Dissemination

9.1. Animation of the scientific community

9.1.1. Animation of the local scene

In 2009, the AtlanMod team initiated a regular series of events called Les Jeudis des Modèles\(^4\). This event has successfully continued during 2011. Two/three times per year approximately, an international expert from the model engineering community is invited to come and present a subject of research or innovation of interest to the scientific and industrial community. These events typically attract between 30 and 60 researchers, students and industrials. In fact, Les Jeudis des Modèles event has become a regional rendez-vous of the model engineering community, attracting people from Rennes, Vannes, La Rochelle, and many other places beyond Nantes. Among others, we have invited Patrick Albert (IBM), Nicolas Rouquette (NASA/JPL), Ed Merks (Macro Modeling), Ivar Jacobson (IJ company), Sridhar Iyengar (IBM) and Jon Whittle (Professor at Lancaster University). It should be noted that these visits allow us to organize different meetings between the researchers of the AtlanMod team and the various industrials attending the main presentation.

Besides this, as part of our commitment to the Eclipse community, we co-organized (together with the Obeo company) an Eclipse DemoCamp event to celebrate the new Eclipse Indigo version release. The Eclipse DemoCamps are an opportunity to showcase all of the technology being built by the Eclipse community and, for the team, an excellent opportunity to meet other Eclipse enthusiasts in the region and show them the Eclipse tools developed by the team.

9.1.2. Organization

In 2011, the AtlanMod team has co-organized the following events:

- J. Cabot has been PC Chair (together with Eelco Visser) of the Int. Conf. on Model Transformation 2011\(^5\)
- M. Tisi has coorganized the 3rd International Workshop on Model Transformation with ATL\(^6\) (MtATL 2011) co-located with the TOOLS conferences in Zurich.
- J. Cabot has coorganized the OCL and Textual Modeling Workshop (OCL’11)\(^7\) co-located with the TOOLS conference in Zurich.

9.1.3. Editorial Bords

Participation to editorial boards of scientific journals:

- Jordi Cabot: Journal of Object Technology

\(^4\) [http://www.emn.fr/z-info/jmodeles/](http://www.emn.fr/z-info/jmodeles/)
\(^6\) [http://www.emn.fr/z-info/atlanmod/index.php/MtATL2011](http://www.emn.fr/z-info/atlanmod/index.php/MtATL2011)
\(^7\) [http://gres.uoc.edu/OCL2011/](http://gres.uoc.edu/OCL2011/)
9.1.4. Reviewing of International Journals

AtlanMod members have collaborated in the reviewing process for the following journals:


9.1.5. Program Committee members

Participation to conference program committees:

- Jordi Cabot:
  - National: French national conference on MDE, Spanish national conference on MDE.
- Robert Tairas:
- Massimo Tisi:

9.2. PhD Juries

- Jordi Cabot: Islam Abdelhalim. PhD confirmation report. University of Surrey (UK)

9.3. Research Evaluation Committees

- Jordi Cabot: Reviewer for Spanish CICYT Research Projects Call, Reviewer for the National UK Projects Call, Reviewer for National Argentinian Projects Call

9.4. Involvement in the Open Source Community via Eclipse

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 and EclipseCon Europe), organization of events targeting the local community, 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 M2M ATL (Frédéric Jouault) and MDT MoDisco (Hugo Bruneliere, also including AM3) projects, the Eclipse reference projects concerning respectively model-to-model transformation and model-driven reverse engineering;
- Commitment to other projects directly under Eclipse.org: EMFT EMF Facet (Hugo Bruneliere), GMT AMW (Frédéric Jouault);
- Creation and development of new incubation projects under Eclipse Labs: EMFToCSP (Jordi Cabot, Carlos Gonzalez) and Virtual EMF (Caue Clasen, Jordi Cabot);
- Organization of an official Eclipse DemoCamp in Nantes, on the 30th of June 2011, for locally promoting the Eclipse Indigo release including the MoDisco, ATL and EMF Facet team’s projects (Hugo Bruneliere, in collaboration with the Obeo and Mia-Software companies);
- Publication of a technical paper on MoDisco in the international JavaTech Journal issue dedicated to this same Eclipse Indigo release (Hugo Bruneliere);
- Presentation of talks during the two main Eclipse events (Hugo Bruneliere): at EclipseCon North America 2011 about MoDisco, at EclipseCon Europe 2011 about Virtual EMF.

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. This collaborative approach, allowing the industrialization of our research prototypes using open source and Eclipse as the medium, has also been presented this year to the OW2 open source community (The open source community for infrastructure software) during their main annual event OW2Con 2011, as part of the Session Open Source Innovation Catalyst (Hugo Bruneliere).

### 9.4.1. Teaching

During the period 2010/11 the members of the AtlanMod team have been in charge of a 360-hour diploma on MDE.

Apart from this, individual members have also had teaching duties in other courses:

- License: J. Cabot is in charge of a 24-hour course on MDE in the CS degree at the Ecole des Mines de Nantes.
- License: M. Tisi. Programmation, 15h, L1, Ecole des Mines de Nantes
- License: M. Tisi. Bases de données, 20h, L2, Ecole des Mines de Nantes
- License: M. Tisi. Structures de données, 17,5h, L2, Ecole des Mines de Nantes
- License: M. Tisi. Programmation Impérative, 22,5h, L1, Ecole des Mines de Nantes
- License: Programmation Par Objets, 9h, L1, Ecole des Mines de Nantes

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8 [http://www.mines-nantes.fr/fr/Formations/Formation-specialisee/MDE](http://www.mines-nantes.fr/fr/Formations/Formation-specialisee/MDE)
CIDRE Project-Team

9. Dissemination

9.1. Animation of the scientific community

Ludovic Mé acts as a

- external reviewer for RAID (14th International Symposium on Recent Advances in Intrusion Detection).
- member of a DGA’s scientific committee.

Christophe Bidan acts as a

Sébastien Gambs acts as a

- member of the scientific committee of the “2nd workshop on games, logic and security (GIPSy 2011)” held in October 2011 in Rennes, France (http://www.irisa.fr/prive/pinchina/GIPSy/gipsy11.html).
- member of the technical program committee of the “4th International Workshop on Security and SOCial Networking (SESOC 2012)” held in March 2012 in Lugano, Switzerland (http://www.sesoc.org/home.htm).

Guillaume Hiet acts as a

- member of the program committee of the “14th International Symposium on Recent Advances in Intrusion Detection (RAID 2011)” held in September 2011 in Menlo Park, California (http://www.raid-symposium.org/raid2011/).
- external reviewer for the TSI journal (Technique et Science Informatiques).

Michel Hurfin acts as a

- member of the program committee of the “3rd IEEE International Symposium on Ubisafe Computing” held in November 2011 in Changsha, China (http://trust.csu.edu.cn/conference/ubisafe2011).
- member of the program committee of the “11st African Conference on research In Computer Science and Applied Mathematics (CARI 2012)” held in October 2012 in Algiers, Algeria (http://www.cari-info.org/).
- external reviewer for the Information and Computation Journal.
- member of the COST-GTAI (reviewer for both ARCs and ADT submissions).
Guillaume Piolle acts as a

- member of the scientific committee of the “2nd workshop on games, logic and security (GIPSy 2011)” held in October 2011 in Rennes, France (http://www.irisa.fr/prive/pinchina/GIPSy/gipsy11.html).
- external reviewer for CDP 2011 (Computers, Privacy & Data Protection), FPS 2011 (Workshop on Foundations & Practice of Security), RAID 2011 (Symposium on Recent Advances in Intrusion Detection), and SecureComm 2011 (Conference on Security and Privacy in Communication Networks).

Nicolas Prigent acts as a

- member of the program committee of the “Symposium sur la Sécurité des Technologies de l’Information et des Communications (SSTIC 2012)” held in June 2012 in Rennes, France (http://www.sstic.org/2012/news/).
- member of the organization committee of the “Symposium sur la Sécurité des Technologies de l’Information et des Communications (SSTIC 2012)” held in June 2012 in Rennes, France (http://www.sstic.org/2012/news/).
- external reviewer for CT-RSA 2011 (Cryptographers’ Track of the RSA Conference).

Eric Totel acts as a

- external reviewer for RAID 2011 (Recent Advances in Intrusion Detection), FPS 2011 (Foundations & Practice of Security), SecureComm 2011 (Conference on Security and Privacy in Communication Networks), and SAR-SSI 2011 (Conference on Network Architectures and Information Systems Security).

Frédéric Tronel acts as a

- external reviewer for RAID 2011 (Recent Advances in Intrusion Detection).
Valérie Viet Triem Tong acts as a

- member of the program committee of the “6th Conference on Network Architecture and Information Systems Security (SAR-SSI 2011)” held in May 2011 at “Ile De Ré”, La Rochelle, France (http://sarsi-conf.org/index.htm)
- external reviewer for the journal “Security and Communication Networks” (Special Issue on Defending Against Insider Threats and Internal Data Leakage).

9.2. Teaching

Ludovic Mé is Professor at Supélec:

Master: “Information systems”, 6 hours, M1 - second year of the engineer degree, Supélec, France
Master: “Security policies”, 3 hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master: “Intrusion detection”, 9 hours of lecture, M2 - Master research, Rennes, France
Master: “Intrusion detection”, 6 hours of lecture, M2 - Master SSI, Université de Limoges, France
Master: “Intrusion detection”, 8 hours of lecture, M2 - Master Pro SSI, université de Rennes 1, France
Master: “Intrusion detection”, 9 hours of lecture, M2 - Master SSI, Supélec & Télécom Bretagne, France
Master: “Security of information systems”, 12 hours of lecture, M2- post-graduate training (master Architecture des Réseaux de Communication), Supélec, France
Master: Ludovic Mé is responsible for the module “Secured information systems”, M2 - third year of the engineer degree, Supélec, France
Master: Ludovic Mé is responsible for the module “Security of data and Infrastructure information systems”, M2 - Master research, Rennes, France (until June 2011)
Doctorat: “Introduction to security issues in Computer science”, 9 hours of lecture, Université de Rennes 1, Doctoral School Matisse, France.

Christophe Bidan is Professor at Supélec:

Licence: “Programming models”, 13 hours, L3 - first year of the engineer degree, Supélec, France
Licence: “Foundations of computer science, data structures and algorithms”, 40 hours including 18 hours of lecture, L3 - first year of the engineer degree, Supélec, France
Master: “Information system”, 6 hours, M1 - second year of the engineer degree, Supélec, France
Master: “Software engineering”, 22 hours, M1 - second year of the engineer degree, Supélec, France
Master: “Supervision of student project”, 9 hours, M1 - second year of the engineer degree, Supélec, France
Master: “Introduction to security threat”, 4.5 hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master: “Cryptography”, 44 hours including 18 hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master: “Audit technique Web”, 3 hours, M2 - third year of the engineer degree, Supélec, France
Sébastien Gambs is Associate Professor at Université de Rennes 1:

Master : “Protection of Privacy”, 32 hours including 16 hours of lectures, M2 - Master Pro SSI, université de Rennes 1, France
Master : “Topics on Authentication”, 16 hours of lectures, M2 - Master Pro SSI, université de Rennes 1, France
Master : Supervision (50%) of the master thesis of Christophe Potin from February to September

Guillaume Hiet is Associate Professor at Supélec:

Licence : “Programming models and languages”, 4 hours, L3 - first year of the engineer degree, Supélec, France
Licence : “Foundations of computer science, data structures and algorithms”, 16 hours, L3 - first year of the engineer degree, Supélec, France
Master : “Introduction to SSI”, 9 hours of lecture, M1 - second year of the engineer degree, Supélec, France
Master : “Supervision of student project”, 9 hours, M1 - second year of the engineer degree, Supélec, France
Master : “Supervision of student project - Computer and electronic”, 1 project, M1 - second year of the engineer degree, Supélec, France
Master : “Introduction to UNIX/Linux”, 3 hours, M2 - third year of the engineer degree, Supélec, France
Master : “Intrusion detection sensors”, 3 hours, M2 - third year of the engineer degree, Supélec, France
Master : “Alert correlation”, 3 hours, M2 - third year of the engineer degree, Supélec, France
Master : “Securing an application vulnerable to buffer overflows”, 8 hours, M2 - third year of the engineer degree, Supélec, France
Master : “Supervision of student project”, 3 hours, M2 - third year of the engineer degree, Supélec, France
Master : “Introduction to UNIX/Linux”, 3 hours, M2 - post-graduate training (master Cyber Security), Supélec, France
Master : “Securing Linux (LDAP authentication, ACL and disk encryption)”, 6 hours, M2 - post-graduate training (master Cyber Security), Supélec, France
Master : “Security of Passwords”, 3 hours, M2 - post-graduate training (master Cyber Security), Supélec, France
Master : “Security of Java”, 3 hours, M2 - post-graduate training (master Cyber Security), Supélec, France
Master : “Intrusion detection sensors”, 3 hours, M2 - post-graduate training (master Cyber Security), Supélec, France
Master : “Preparation for the ICTF competition in computer security”, 12 hours, M2 - post-graduate training (master Cyber Security), Supélec, France
Master : “Securing UNIX/Linux”, 7 hours of lecture, M2 - post-graduate training CQP, Supélec, Gif-sur-Yvette, France
Master : “Intrusion detection”, 10 hours of lecture, M2 - post-graduate training CQP, Supélec, Gif-sur-Yvette, France
Master : “Intrusion detection (Introduction)”, 20 hours including 8 hours of lecture, M2 - Master Pro SSI, université de Rennes 1, France
Master : “Intrusion detection (Introduction)”, 10 hours including 4 hours of lecture, M2 - ESIR (Ecole supérieure d’ingénieur de Rennes), Université de Rennes 1, France
Supervision (100%) of the master thesis (and engineering internship) of Mounir Assaf (Supélec) from February to September
Supervision (50%) of the master thesis of Vincent Laporte (ENS) from February to June
Michel Hurfin contributes to the transfer of knowledge towards students:

Master: “Distributed protocols”, 7.5 hours of lecture, M2 - post-graduate training (master Architecture des Réseaux de Communication), Supélec, France

Guillaume Piolle is Associate Professor at Supélec:

Licence: “Models and programming languages”, 9 hours, L3 - first year of the engineer degree, Supélec, France
Licence: “Foundations of computer science, data structures and algorithms”, 18 hours, L3 - first year of the engineer degree, Supélec, France
Licence: “Software engineering”, 18 hours, L3 - first year of the engineer degree, Supélec, France
Master: “C++/Qt”, 12 hours, M2 - third year of the engineer degree, Supélec, France
Master: “Network access protection”, 3 hours, M2 - third year of the engineer degree, Supélec, France
Master: “Web technologies”, 8.25 hours, M2 - post-graduate training, Supélec, France
Master: “Privacy and data protection on Internet”, 9 hours, M2 - post-graduate training, URFIST Ouest (Unité Régionale de Formation à l’Information Scientifique et Technique) – Université Rennes 2, France.
Master: “Supervision of student project”, 9 hours, M1 - second year of the engineer degree, Supélec, France

Nicolas Prigent is Associate Professor at Supélec:

• Licence: “Programming”, 20 hours, L3 - first year of the engineer degree, Supélec, France
• Master: “Network programming”, 15 hours, M2 - third year of the engineer degree, Supélec, France
• Master: “Network programming”, 11 hours, M2 - post-graduate training, Supélec, France
• Master: “Programming and data bases”, 15 hours, M2 - third year of the engineer degree, Supélec, France
• Master: “Computer security”, 4 hours, M2 - third year of the engineer degree, Supélec, France
• Master: “Programming”, 6 hours of lecture, M2 - third year of the engineer degree, Supélec, France
• Master: “Operating systems”, 12 hours of lecture, M2 - third year of the engineer degree, Supélec, France
• Master: “Computer science (computability and complexity)”, 3 hours of lecture, M2 - third year of the engineer degree, Supélec, France
• Master: “Operating systems (MS Windows)”, 2 hours of lecture, M2 - post-graduate training, Supélec, France
• Master: “Data bases”, 3 hours of lecture, M2 - post-graduate training, Supélec, France
• Master: “Security”, 17 hours including 9 hours of lecture, M2 - post-graduate training, Supélec, France

Eric Totel is Associate Professor at Supélec:

Licence: “Models and programming languages”, 19.5 hours including 10.5 hours of lecture, L3 - first year of the engineer degree, Supélec, France
Licence: “Foundations of computer science, data structures and algorithms”, 6 hours, L3 - first year of the engineer degree, Supélec, France
Master : “Computer systems’ architecture”, 30 hours, M1 - second year of the engineer degree, Supélec, France
Master : “C language”, 24 hours including 6 hours of lecture, M2 - master SSI (Sécurité des systèmes d’information), Supélec, France
Master : “C language”, 12 hours including 3 hours of lecture, M2 - post-graduate training (master Architecture des Réseaux de Communication), Supélec, France
Master : “C language and C++ language”, 12 hours including 6 hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master : “Description and specification languages”, 12 hours including 3 hours of lecture, M2 - post-graduate training (master Architecture des Réseaux de Communication), Supélec, France
Master : “Dependability”, 6 hours including 4.5 hours of lecture, M2 - third year of the engineer degree and master research, Supélec, France
Master : “Dependability”, 3 hours of lecture, M2 - third year of the engineer degree (ingénierie des systèmes automatisés), Supélec, France
Master : “Dependability”, 4.5 hours of lecture, M2 - post-graduate training (master Architecture des Réseaux de Communication), Supélec, France
Master : “Supervision of student project”, 4 projects, M1 - second year of the engineer degree, Supélec, France
Master : “Supervision of student project”, 1 project, M2 - third year of the engineer degree, Supélec, France

Frédéric Tronel is Associate Professor at Supélec:

Licence : “LISP”, 3 hours, L3 - first year of the engineer degree, Supélec, France
Licence : “Software engineering”, 18 hours, L3 - first year of the engineer degree, Supélec, France
Master : “Operating systems”, 10.5 hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master: “Compilation”, 21 hours including 9 hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master : “Computation and automated reasoning”, 6 hours including 4.5 hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master : “Knowledge of the threat: buffer overflow attack”, 15 hours including 3 hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master : “Knowledge of the threat: buffer overflow attack”, 12 hours including 6 hours of lecture, M2 - third year of the engineer degree, Télécom Bretagne, France
Master : “Theory and practice of firewalls”, 6 hours, M2 - third year of the engineer degree, Supélec, France
Master : “Theory and practice of firewalls”, 4.5 hours, M2 - post-graduate training, Supélec, France
Master : “Theory and practice of firewalls”, 3 hours, M2 - master SSI (Sécurité des systèmes d’information), Supélec, France
Master : “Tools for virtualization of operating systems”, 1.5 hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master : “Tools for virtualization of operating systems”, 1.5 hours of lecture, M2 - post-graduate training, Supélec, France
Master: “Linux for embedded systems”, 9 hours including 3 hours of lecture, M2 - third year of the engineer degree, Supélec, France

Master: “Computability in distributed systems”, 7.5 hours including 6 hours of lecture, M2 Master research Rennes, France

Valérie Viet Triem Tong is Associate Professor at Supélec:

Licence: “Programming”, 9h, L3 - first year of the engineer degree, Supélec, France
Master: ”Computer security”, 13h30 hours including 4h30 of lecture, M2 - third year of the engineer degree, Supélec, France
Master: “Game Theory”, 20h of lecture, M1 - second year of the engineer degree, Supélec, France
Master: “Foundations of computer science”, 10h30 hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master: “Spontaneous networking”, 3h hours of lecture, M2 - third year of the engineer degree, Supélec, France
Master: “Supervision of student project”, 4 projects, M1 - second year of the engineer degree, Supélec, France
Master: Valérie Viet Triem Tong is responsible for the module “Security of data and Infrastructure information systems”, M2 - Master research, Rennes, France (since September 2011)
Master: “Supervision of student training”, 1 training period (6 months), M2 - Supélec, France

Four PhD defenses in 2011 and eleven thesis in progress:

PhD : Mohamed Ali Ayachi, “Contributions à la détection de comportements malhonnêtes dans les réseaux ad hoc AODV par analyse de la confiance implicite”, université de Rennes 1, February 24th 2011, supervised by Christophe Bidan and Nicolas Prigent.

PhD : Jean-Marie Borello, “Etude du métamorphisme viral : modélisation, conception et détection”, université de Rennes 1, April 1st 2011, supervised by Ludovic Mé (90%) and Eric Filiol (10% - ESIÉA Laval).

PhD Jonathan Christopher Demay, “Génération et évaluation de mécanismes de détection des intrusions au niveau applicatif”, Supélec, July 1st 2011, supervised by Ludovic Mé, Eric Totel, and Frédéric Tronel.


PhD in progress : Radonaina Andriatsimandefitra, “Protection de l’information dans l’environnement Android”, started in October 2011, supervised by Ludovic Mé (20%) and Valérie Viet Triem Tong (80%).

PhD in progress : Mounir Assaf, “Vérification de propriétés de sécurité par analyse statique sur des programmes C de grande taille”, started in November 2011, supervised by Ludovic Mé (20%), Éric Totel (40%), and Frédéric Tronel (40%).

PhD in progress : Georges Bossert, “Méthodologie d’évaluation des systèmes de détection d’intrusions”, started in October 2010, supervised by Ludovic Mé (20%) and Guillaume Hiet (80%).
PhD in progress: Olivier Ferrand, “Contournements des anti-virus et protection contre ces contournements”, started in June 2011, supervised by Eric Filiol (50% - ESIEA Laval) and Ludovic Mé (50%).

PhD in progress: Stéphane Geller, “Administration de politiques de sécurité reposant sur le contrôle des flux d’information”, started in October 2009, supervised by Ludovic Mé (20%) and Valérie Viet Triem Tong (80%).

PhD in progress: Ahmed Gmati, “Redefining the concept of privacy in privacy-preserving data mining”, started in December 2010, supervised by Sébastien Gambs (50%) and Michel Hurfin (50%).

PhD in progress: Geoffroy Guéguen, “Métamorphisme viral et grammaires formelles”, université de Rennes 1, started in March 2011, supervised by Sébastien Josse (50% - ESIEA Laval) and Ludovic Mé (50%).

PhD in progress: Christophe Hauser, “Détection d’intrusions dans les systèmes distribués”, started in October 2009, in coordination with Queensland University of Technology, Brisbane, Australia (Prof. Andrew Clarck), supervised by Ludovic Mé (20%) and Frédéric Tronel (80%).

PhD in progress: Christopher Humphries, “Visualisation d’événements de sécurité”, started in December 2011, supervised by Christophe Bidan (20%) and Nicolas Prigent (80%).

PhD in progress: Regina Marin, “Privacy protection in distributed social networks (Protection de la vie privée dans les réseaux sociaux distribués)”, started in November 2011, supervised by Christophe Bidan (20%) and Guillaume Piolle (80%).

PhD in progress: Thomas Demongeot, “Protection des données utilisateur dans les web services”, Telecom Bretagne, started in September 2008, supervised by Eric Totel (50%) and Valérie Viet Triem Tong (50%).

Some members of the team also participate to the supervision of external PhD students. Sébastien Gambs is co-supervising Ai Thanh Ho (PhD student from the Université de Montréal, Canada), Mohammad Nabil Al-Aggan (PhD student from ASAP, INRIA Rennes), Miguel Nunez del Prado Cortez (PhD student from LAAS-CNRS, Toulouse), and Moussa Traore (PhD student from LAAS-CNRS, Toulouse). Christophe Bidan and Nicolas Prigent are co-supervising Akli Redjedal (PhD student from CIDER/IRISA, Rennes). Some members of the team have participated to PhD committees:

- Ludovic Mé was a member of the PhD committee (reviewer) for the PhD of Thibault Cholez entitled “Supervision des réseaux pair à pair structurés appliquée à la sécurité des contenus”, université Henri Poincaré Nancy, June 2011.
- Ludovic Mé was a member of the PhD committee (reviewer) for the PhD of Sophie Gastellier-Prevost entitled “Vers une détection des attaques de phishing et pharming côté client”, Télécom SudParis, November 2011.
- Ludovic Mé was a member of the PhD committee for the PhD of Samer Wazan entitled “Gestion de la confiance dans les infrastructures à clés publiques”, université de Toulouse - IRIT, December 2011.
- Christophe Bidan was a member of the PhD committee (reviewer) for the PhD of Claire Sondes Larafa entitled “Services AAA dans les réseaux ad hoc mobiles”, Télécom SudParis, October 2011.
- Michel Hurfin was a member of the PhD committee (reviewer) for the PhD of Adrienne Tankeu Choitat entitled “Approches outillées pour le développement des systèmes interactifs intégrant les aspects sûreté de fonctionnement et utilisabilité”, université de Toulouse - IRIT, December 2011.
Knowledge dissemination is also an objective of the team:

- Ludovic Mé gave an invited talk entitled “Pourquoi nos logiciels sont-ils vulnérables ?” during the “Assises nationales de la recherche stratégique” organized by the CSFRS (Conseil Supérieur de la Formation et de la Recherche Stratégiques) in June 2011 in Paris.
- To prepare the forthcoming introduction of a new teaching speciality entitled “Informatique et Sciences du Numérique (ISN)” in high schools, Sébastien Gambs and Nicolas Prigent trained teachers and taught a course on the security topic.
- Sébastien Gambs has participated to the event “à la découverte de la recherche” (7 interventions in high schools)
- Under the supervision of the association “Math.en.Jeans”, Sébastien Gambs has interacted with high school students of Rennes and Auray about the topic “definition and quantification of anonymity”.

In January 2011, Guillaume Piolle has been awarded by the Commission nationale de l’informatique et des libertés (CNIL). His thesis entitled “Agents utilisateurs pour la protection des données personnelles : modélisation logique et outils informatiques” (Université Jean Fourier de Grenoble) has received the prize “CNIL informatique et libertés, mention spéciale du jury”.

8. Dissemination

8.1. Animation of the scientific community

M. Bravetti: Program Committee member of the following conferences: 8th European Performance Engineering Workshop (EPEW); 4th International Conference on Fundamentals of Software Engineering (FSEN); 4th IEEE International Conference on Software Testing, Verification and Validation (ICST); 1st International Workshop on Trustworthy Service-Oriented Computing; Process Algebra and Coordination (PACO); 1st Workshop on Formal Methods in the Development of Software (WS-FMDS); 11th International Conference On Quality Software (QSIC); 4th IEEE International Conference on Cloud Computing (CLOUD). Invited lecturer at 7th TAROT Summer School on Software Testing, Verification and Validation (TAROT) Saint Petersburg, Russia.


U. Dal Lago: Program Committee member of the following conferences: Tenth International Conference on Typed Lambda Calculi and Applications (TLCA), Novisad, Serbia; International Workshop on Games in Logic and Programming (GaLoP), Saarbrucken, Germany. An invited talk at the Workshop on Geometry of Interaction, Traced Monoidal Categories and Implicit Computational Complexity, Kyoto, Japan, November 2011.

M. Gabbrielli: Organizer in March 2011 of the third International School on Computational logic. Member of the editorial board of the Int’l Journal Theory and Practice of Logic Programming. Member of the program committee of the 4th International Conference on Fundamentals of Software Engineering (FSEN).

I. Lanese: Program Committee co-Chair of the Service Oriented Architectures and Programming track of the 26th Annual ACM Symposium on Applied Computing (SAC 2011), Taichung, Taiwan Program Committee member of the following conferences: 1st Conference on Electronics, Telecommunications and Computers (CETC) Lisboa, Portugal; 1st International Workshop on TRUstworthy Service Oriented Computing (INTRUSO), Copenhagen, Denmark; 4th Interaction and Concurrency Experience (ICE), Reykjavik, Iceland. Invited to give a talk at IMT Lucca, Italy, on “Control of Reversibility”, October 2011.

C. Laneve: Program Committee member of: 18th International Workshop on Expressiveness in Concurrency (EXPRESS), Aachen, Germany, September 2011; 8th International Conference on Quantitative Evaluation of SysTems (QUEST), Aachen, Germany. Invited speaker at the 5th Workshop on Membrane Computing and Biologically Inspired Process Calcu, Versailles, September 2011.

S. Martini: Program Committee member of: Foundational and Practical Aspects of Resource Analysis (FOPARA), Madrid, Spain; Second Workshop on Developments in Implicit Computational Complexity (DICE), Saarbrucken, Germany; Member of the final jury for the PhD of Alberto Carraro, Universitá Ca’ Foscari, Venezia, Italy. Rapporteur of the PhD thesis of Beniamino Accattoli, Universitá di Roma “La Sapienza”, Italy. Organizing Committee member of the XXIV Incontro di Logica (AILA 2011), Bologna, February 2-4, 2011.

D. Sangiorgi: Member of the editorial board of the journals: Logical Methods in Computer Science, Acta Informatica, and Distributed Computing. Chairman of the IFIP Working Group 2.2 (Formal description of programming concepts). Program Committee member of the conferences: 4th International Conference on Algebraic Informatics, Linz, Austria; Twenty-Sixth Annual IEEE Symposium on Logic in Computer Science (LICS), Toronto, Ontario, Canada; the 38th International Colloquium on Automata, Languages and Programming (ICALP), Zurich, Switzerland; the Twenty-seventh Conference on the Mathematical Foundations of Programming Semantics (MFPS), Pittsburgh; workshop Process Algebra and Coordination (PaCo), Reykjavik, Iceland. Member of the evaluation committee of the “Habilitation a Diriger des Recherche” (HDR) of Alan Schmitt, INRIA Grenoble, France. Invited lecturer at the school ’Software Engineering and Formal Methods’ November 7-11, 2011 Montevideo, Uruguay.
G. Zavattaro: Program Committee Chair of 9th IEEE European Conference on Web Services (ECOWS). Program Committee member of the following conferences: 5th International Workshop on Reachability Problems (RP); 1st International Workshop on Verification, Analysis, and Testing of Service Systems (VATSS); 8th International Workshop on Web Services and Formal Methods (WS-FM); 5th Membrane Computing and Bio logically Inspired Process Calculi workshop (MeCBIC); 4th IEEE International Conference on Cloud Computing (CLOUD); 2nd Int. Workshop on Interactions between Computer Science and Biology (CS2Bio); Twenty-Seventh Conference on the Mathematical Foundations of Programming Semantics (MFPS). Invited speaker at 1st International Workshop on Process Algebra and Coordination (PaCo). Member of the Editorial Board of the Journal of Software (JSW). Member of the evaluation committee of the “Habilitation a Diriger des Recherches” (HDR) of Gwen Salaun, INRIA Grenoble, France.

8.2. Organisation of events

- Third International Spring School on Computational Logic, 10-15 April 2011, Bertinoro, Italy
- The Oregon Programming Languages Summer School (OPLSS) has been held at the University of Oregon each summer since 2002. The focus of the 2011 edition has been in the mix or interplay of theory and practice in program verification. The 2011 edition featured 14 lecturers and 94 students. Marco Gaboardi has been involved in the organisation.
- XXIV Incontro di Logica (AILA 2011), Bologna; February 2-4, 2011. The series of "Incontri di Logica" offers researchers in mathematics, philosophy of science and computer science an arena to discuss all aspects of mathematical logic which relate to their research. The 2011 edition held in Bologna has welcomed about 100 participants mainly from Italy.

8.3. Teaching

Below are the teaching activities of the Focus members during 2011.

- Mario Bravetti
  Undergraduate: “Tecnologie Web”, 46 hours, 3rd year, University of Bologna, Italy.
  Master: “Tecnologie Web Avanzate”, 46 hours, 1st or 2nd year, University of Bologna, Italy.

- Ugo Dal Lago
  Undergraduate: “Introduction to Programming in Java”, 20 hours, 1st 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.

- Marco Gaboardi
  PhD: “Semantics of Linear Logic”, 8 hours, Universita’ degli Studi di Milano, Italy.
  PhD: “Category Theory and Programming Languages”, 10 hours, University of Oregon, USA.

- Ivan Lanese
  Undergraduate: “Programmazione”, 40 hours, 1st year, University of Bologna, Italy.
  Master: “Data Bases and Information Systems”, 24 hours, 1st year, University of Bologna, Italy.

- Cosimo Laneve
Undergraduate: “Programmazione”, 90 hours, 1st year, University of Bologna, Italy.  
Master: “Analisi di Programmi”, 80 hours, 1st year, University of Bologna, Italy.

- Simone Martini  
  Undergraduate: “Programming languages”, 40 hours, 2nd year, University of Bologna, Italy.  
  Undergraduate: “Computer abilities for biologists”, 8 hours, 1st year, University of Bologna, Italy.  
  Master: “Types and programming languages”, 40 hours, 1st year, University of Bologna, Italy.  
  Master: “Classical Logic”, 12 hours, 1st and 2nd 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.

- Gianluigi Zavattaro  
  Master: “Informatica Teorica”, 72 hours, 1st year, University of Bologna, Italy.  
  Master: “Linguaggi di Programmazione”, 48 hours, 2nd year, 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”, 40 hours, 2nd year, University of Bologna, Italy.

- Elena Giachino  
  Undergraduate: “Programmazione”, 40 hours, 1st year, University of Bologna, Italy.

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.

Ornela Dardha, january 2011, Types for processes, D. Sangiorgi.  
Ferdinanda Camporesi, january 2009, Analysis of system biology, R. Cousot (Ecole Normale, Paris) and M. Gabbrielli  
Jean-Marie Madiot, september 2011, Types, proofs and proof techniques for process calculi, D. Hirschkoff and D. Sangiorgi.  
Jacopo Mauro, january 2009, Constraints and concurrency, M. Gabbrielli.  
Giulio Pellitta, january 2011, Implementations of geometry of interaction, S. Martini.  
Paolo Parisen Toldin, january 2010, Implicit computational complexity for probabilistic classes, S. Martini.

A few other PhD students are (co)-supervised by members of Focus, but are not in the Focus team:

- Michele Alberti - Marseille; 1/12/2011; Separation results in the algebraic lambda-calculus; L. Regnier/S. Martini  
- Ivano Ciardelli - Bordeaux; 1/11/2010; Models of first order linear logic and their use in linguistics; C. Retoré/S. Martini  
- Claudio Mezzina - Grenoble; 1/9/2008; Reversible computations in processes; Stefani-Sangiorgi.  
- Marco Solieri - Paris Nord; 1/12/2011; Complexity of reduction in sharing graphs; S. Guerrini/S. Martini  
- Sara Zuppiroli, Bologna; january 2010; models for quantum computing; U. Dal Lago.
INDES Project-Team

9. Dissemination

9.1. Seminars and conferences

- **Pejman Attar** attended the conference MSR’11 in Lille, where he presented the work [15]. In November/December 2011, he participated in the SYNCHRON’11 5 day-workshop in Melun, where he presented [15] and the future perspectives of his work.

- **Gérard Berry** gave the following conferences:
  - *Challenges and Constructive Solutions for Complex Embedded Systems*, University of Bordeaux.
  - *Constructive Semantics for Discrete and Continuous Systems*, University of Barcelona.
  - *Logic and Digital Circuits: from Practice to Theory* Workshop Analysing programs: logic to the rescue, 14th Congress of Logic, Methodology and Philosophy of Science, Nancy.
  - *Lecture « Hardware and software synchronous design and verification with Esterel v7* aux Microsoft Research Laboratories, Mountain View, CA.

- **Gérard Boudol** participated in a one-week Seminar in Dagstuhl on Multi-Core Memory Models and Concurrency Theory, where he gave a talk. He also gave a talk at the GG&JJ workshop in honour of Gérard Berry and Jean-Jacques Lévy, held in Gerardmer.

- **Ilaria Castellani** participated in the Behavioural Types workshop, in Lisbon, where she presented a preliminary version of the work [11].
  In May and October, she visited the university of Torino to pursue the collaborative work [11] and [10].
  In September, she attended the conference CONCUR 2010, as well as the associated workshop EXPRESS’11, where she presented the work [11] and the symposium on Trustworthy Global Computing (TGC’11), where the work [10] was presented by M. Dezani as an invited talk. The three events were held jointly in Aachen.

- **Zhengqin Luo** participated in the Cross-Seminar at INRIA in January, where he presented his work on semantics and security of web applications. In March, he participated to ETAPS conference, and presented his work on code injection prevention in TOSCA [13]. He visited Microsoft Research Cambridge from July to September, where he gave a talk on the work of automated mashup isolation in July. In October, he defended his thesis on the title of “Semantics and Security of Web Application” at INRIA [6].

- **Cyprien Nicolas** participated at the SPLASH conference organized by the ACM, where he gave three talks. The first talk was at the Scheme workshop annual conference about Manuel Serrano’s work on HopTeX. The second was at DLS’11 about the new Hop interpreter, paper by Manuel Serrano and Bernard Serpette. Last talk was presenting Cyprien’s work on HipHop (work done with Gérard Berry and Manuel Serrano) at the new International Workshop on Programming Language And Systems Technologies for Internet Clients (PLASTIC 2011). Cyprien also presented HipHop at SYNCHRON’11 near Fontainebleau.
José Santos gave a seminar entitled “Coping with dynamically allowed flow policies” concerning his work on information flow for the SQIG research group at IST Lisbon (in April 2011).

Tamara Rezk presented her work in the FCC workshop, June 2011, Paris. In June 2011, she gave a seminar in LSV, where she was invited. In October 2011, she attended CCS’11 where her work was presented.

Manuel Serrano gave a talk at the GG&JJ workshop in honour of Gérard Berry and Jean-Jacques Lévy, held in Gerardmer. He presented the diffuse computing at the Microsoft Software Summit in April. He presented the Hop programming language at Ircam in May. Manuel Serrano presented Hop at the meeting Inria, Industrie mobile initiative 2011.

9.2. Animation

Gérard Berry is a member of the Académie des sciences, of the Académie des technologies, and the Academia Europaea. He is member of the steering committee of the ANR. He was the chair of the evaluation committee of University of Santander (12-16 Mars). He was the director of the scientific board of the computer science department of the École Normale Supérieure (May). He was a member of the scientific board of IRCAM (December). He was a member of Franco-Taiwanaïs award (Tapei 2011).

Gérard Berry was the chair of the PhD jury of Stéphanie Delaune. We was a member of the HDR of Frédéric Boulanger, Supelec and Eric Madeleine, Nice. He was a member of the PhD jury of Marc Galceran, University of Barcelona.

Ilaria Castellani was an examiner of the PhD thesis Une étude dénotationnelle de la mobilité by Joël-Alexis Bialkiewicz, UPMC, Paris (supervisor: Frédéric Peschanski).

Tamara Rezk is a member of the programme committees of Bytecode, PLAS (co-chair with Sergio Maffeis), SAFA (co-chair). In December, she reviewed a grant proposal for the Estonian Science Foundation (ETF). She was a reviewer for TISSEC (journal) and MSCS (journal). In October, she was part of the jury in the thesis defense of Zhengqin Luo.

Manuel Serrano is the coordinator of the ANR DEFIS project PWD. He served on the program committees of the following conferences:
  - SCHEME’11, 12th Workshop on Scheme and Functional languages.
  - DLS’11, 6th Dynamic Languages Symposium.
  - COORDINATION’11, 6th International Federated Conferences on Distributed Computing Techniques.

Manuel Serrano was a member of the jury of the PhD Thesis of Benjamin Canou (Universities Paris 6 & 7) and Zhengqin Luo (University of Nice). He was a member of the selection committee of PPS (Paris 7).

9.3. Teaching

Gérard Berry gave the following conferences:
  - La révolution numérique dans les sciences, Université populaire de la vallée de l’Eyrieux, 14 octobre 2011.
  - Table ronde Préparés à Internet à l’Ecole des Mines de Paris, 22 septembre 2011.
– Systèmes d’informations médicales, CNAM, 23 juin 2011.
– Conférence-débat Attention, les digital natives arrivent, Ecole de Paris du management, 7 juin 2011.
– Le monde devint numérique, cycle de trois conférences organisées par Universciences à la Cité des sciences de La Villette, Paris :
  * Les racines scientifiques du monde numérique, 18 mai 2011,
  * La révolution numérique dans les sciences, 25 mai 2011,
  * A la chasse aux bugs, la maladie du certain, 8 juin.
– Révolution numérique et inversions mentales, Séminaire d’Histoire et de Philosophie des Sciences, University of Montpellier, 26 avril 2011.
– Les inversions mentales de l’informatique, racines de la révolution numérique, Cycle de conférences Sciences en question du Collège de France à Tunis, organisé par l’Institut français de coopération, ambassade de France à Tunis, 11 avril 2011. Live broadcast to the Universities of Sfax et Gabès and palais des sciences de Monastir. Recorded for a DVD.
– Informatique et société numérique aux lycées français Flaubert de Tunis.
– Distinguished Lecture The Mental Inversions that Root the Digital Revolution University of Birmingham, 16 février 2011.
– Bouleversements numériques et inversions mentales chez l’éditeur de logiciels financiers Murex, 1er février 2011.
– Les inversions mentales de l’informatique, racines de la révolution numérique, La science à Sophia, Fondation Sophia-Antipolis, 1 février 2011.
– Pourquoi le monde et les sciences deviennent numériques Jean Cocteau high school of Miramas, 4 janvier 2011.

• Ilaria Castellani taught 9h in the course “Programmation web diffuse” of the Paris 6 Master, UPMC, held together with Manuel Serrano and Tamara Rezk.
  From June to July 2011, she supervised the L3 internship “Prime information flows and compositionality of security properties or parallel programs” by Hadrien Batmalle.
• Johan Grande is giving first year algorithmics and programming (Python) tutorial/practical classes and supervising a third year programming project, both at Polytech’Nice (52 hours altogether).
• Tamara Rezk taught a course on provable cryptography in the master “Cryptographie et Sécurité” at University of Nice-Sophia Antipolis. She supervised two Phd students, Zhengqin Luo (who defended in october and stay as a postdoc at Inria) and José Santos. In February 2011, she taught a course on “Secure web programming”, Paris 6 Master, UPMC.
• Manuel Serrano taught 9h in the course “Programmation web diffuse” of the Paris 6 Master, UPMC.
MYRIADS Team

9. Dissemination

9.1. Animation of the scientific community

9.1.1. Leadership, Steering Committees and community service

Ch. Morin served as the scientific chair of the first Contrail summer school held in Presqu’île de Giens, France from June 27 to July 1st, 2011 (http://contrail-project.eu/summerschool-2011).

N. Parlavantzas was a member of the Organizing Committee of RenPar’20 conference.

J.-L. Pazat served as the Chair of the Organizing Committee of the RenPar, CFSE and Sympa federated conference series. He is the chairman of the Steering Committee of RenPar (http://www.renpar.org/).

Th. Priol is a member of the Editorial Board of the International Journal of Intelligent Engineering Informatics and of the International Journal of Web Services Research. He is program vice-chair for ICPP 2012, in charge of the topic “Programming Models, Languages and Environments”. He is is the Chairman of the ServiceWave Steering Committee.

C. Tedeschi coordinated the organization of the RenPar’20/Sympa’14/CFSE 8 joint French-speaking conferences held in Saint-Malo, France, in May 2011.

9.1.2. Program Committees


N. Parlavantzas served in the Program Committees of RTSOAA 2011 and INFOCOMP 2011 international conferences.


C. Tedeschi is a member of the Program Committees of ICCS 2011, ICCS 2012, AINA 2012 and Closer 2012 international conferences, and was the PC chair of RenPar’20 french-speaking conference.

9.1.3. Evaluation committees, consulting

J.-P. Banâtre is the INRIA representative in the Contrail General Assembly.

Ch. Morin has served as a member for a selection committee of Lille 1 University and of Ensimag, Grenoble to appoint an assistant Professor in Computer Science. She acted as a referee for the HDR Committee of Jean-Marc Menaud (Ecole des Mines de Nantes), Eric Renault (University of Paris 6) and was a member of the HDR Committee of Laurent Réveillère (University of Bordeaux 1) and as a member for the PhD Committee of Anne-Cécile Orgerie (ENS Lyon). She was a member of the selection committee for the PES (scientific excellence award) for junior and senior researchers at INRIA. She was a member of the IRISA selection committee for the PhD grants. She acted as an expert to review proposals for the French Research Agency (ANR). She acted as expert to review a proposal for a CIFRE PhD grant for the ANRT. She is a member of the cloud computing expert group in the Software & Service Architectures and Infrastructures unit of the European Commission.

Th. Priol acts as an expert to review FP7 proposals and projects for the European Commission. He is member of the Scientific Advisory Board for the Contrail and VENUS-C FP7 projects. He was also member of the AERES panel of experts to evaluate Institut Télécom.
9.1.4. Conferences, seminars, invitations


D. Dib gave a talk entitled "Adaptation dynamique des fonctionnalités d’un système d’exploitation large échelle" at the Adapt workshop, Saint-Malo, May 2010.


H. Fernandez gave a talk on "Chemically-inspired Workflow Management Systems", at the Vrije University Amsterdam (VUA) on November 17, 2011 during his visit at VUA in the context of the S-Cube Project.

Y. Jégou gave a talk entitled "Open Computing Infrastructures for Elastic Services: Contrail Approach" at the 2nd WoSS Workshop in Timisoara, Romania in June 2011. He gave a lecture on XTREEMOS at the first Contrail summer school on Grid and Cloud computing held in Presqu’île de Giens, France in June 2011. He presented the exploitation of the OVF application format in Contrail at the Open World Forum meeting, Paris in September 2011. He gave a talk entitled "Contrail Cloud Federations" at the OCC innovating-group meeting, Lyon in September 2011. He presented XTREEMOS system and Contrail project at SC’11, Seattle, USA (November 2011).


Ch. Morin gave a talk entitled "From Grids to Federated Clouds: Virtualization of Large-scale Distributed Computing Infrastructures" at a workshop organized for the third anniversary of the INRIA - Alcatel Lucent Bell Labs joint laboratory, Rocquencourt, France, in January 2011. She presented a talk entitled "Le centre INRIA Rennes : un acteur européen dans le domaine des grilles et des clouds" at the AERES evaluation of the INRIA Rennes Bretagne Atlantique research center in February 2011. She was invited to give a seminar entitled "Building Large Scale Dynamic Computing Infrastructures over Clouds" at UC Berkeley and at the Lawrence Berkeley National Laboratory, Berkeley, USA in May 2011. She gave an invited talk entitled "Open Computing Infrastructures for Elastic Services: Contrail Approach" at the 5th international workshop on Virtualization Technologies in Distributed Computing (VTDC), co-located with HPDC 2011, San Jose, USA, June 2011. She gave a talk entitled "Introduction to Contrail school & Contrail FP7 project" at the first Contrail summer school on Grid and Cloud computing held in Presqu’île de Giens, France in June 2011. She gave a talk entitled "Open Computing Infrastructures for Elastic Services: The Contrail European Project Approach" at the Advanced Computing for Science department seminar at Lawrence
Yann Radenac gave a talk entitled "XtreemOS and COOP: concepts, use cases and limits" at the COOP bi-annual project meeting, Rennes, France, April 2011.


9.1.5. Administrative Responsibilities

C. Morin is a member of the Project-Team Committee of INRIA - Rennes Bretagne Atlantique (Comité des projets).

Jean-Louis Pazat is the leader of the “Large Scale Systems” department of IRISA. He is member of the Steering committee (conseil d’administration) of Insa Rennes. He is a member of the Computer Science Department committee and member of the IRISA-INSA Lab comité. He is the local coordinator for the international exchange of students at the computer science department of Insa.

T. Priol is Scientific Deputy Director at INRIA, responsible for monitoring all research, development, transfer and partnership activities in the thematic areas of Networks and Telecommunication, Distributed and High Performance Computing, Distributed Systems and Services. He was the Research Director of EIT ICT Labs till October 2011.

P. Riteau was elected member of the INRIA Rennes - Bretagne Atlantique Center Council (Comité de Centre).

C. Tedeschi was elected as a member of the administration council of the EECS departement of the University of Rennes 1.


Piyush Harsh animates the Interoperability Working Group created on the OpenNebula ecosystem by INRIA and UCM.

Christine Morin participated in the "A la découverte de la recherche" action presenting her researcher profession to a class at lycée Jean Macé (high school) in Rennes, France (March 2011).

9.2. Teaching

Christine Morin is responsible for a graduate teaching Module Distributed Systems: from networks to Grids of the Master Program in Computer Science, UNIVERSITY RENNES 1.
Christine Morin:

Master : Grid Computing (as part of the Distributed Systems: from networks to Grids teaching unit), 6.5 ETD, M2RI, University of Rennes 1, France
Master : Cluster single system image operating systems, 4.5 ETD, M2, Institut Telecom Sud Paris, France
Master : Energy management in computing infrastructures (as part of the Eco-STIC module), 4.5 ETD, M1, Supelec, France
Master : XtremOS in the Clouds, 2 ETD, M1, University of Westminster, UK.

Nikos Parlavantzas (at INSA Rennes):

• 4th year: Operating Systems (40 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):

• 4th year: Advanced Operating Systems (31 hours ETD)
• 4th year: Parallel Programming (39 hours ETD)
• 4th year: Networking and SOA (39 hours ETD)
• 4th year: Software development project (60 hours ETD)

Cédric Tedeschi (at the University of Rennes 1):

• Licence 3: Organization of Operating System (77 hours ETD)
• Licence 3: Algorithmic methods (22 hours ETD)
• Master 1: Multitask Operating Systems (65 hours ETD)
• Master 2: Muti-users systems (50 hours ETD)
• Master 2: Internet of Services (6 hours ETD)

PhD & HdR :

PhD : Jérôme Gallard, Flexible Management of Distributed Computing Infrastructures, University of Rennes 1, May 6, 2011, Christine Morin
PhD : Mohamed Zouari, Software architecture for dynamic adaptation; application to data replication, University of Rennes 1, June 28, 2011, Françoise André, Mayte Segarra-Montesinos
PhD : Pierre Riteau, Dynamic Execution Platforms over Federated Clouds, University of Rennes 1, December 2, 2011, Thierry Priol, Christine Morin
PhD in progress : Eugen Feller, Energy aware resource management in IaaS clouds, December 2009, Christine Morin
PhD in progress : Djawida Dib, Dynamic adaptation in distributed systems, October 2010, Christine Morin, Nikos Parlavantzas
PhD in progress : Stefania Costache, An economical approach for resource management in private clouds, May 2010, Christine Morin, Nikos Parlavantzas
PhD in progress : Erwan Daubert, Environmental adaptation of services in large scale distributed architectures, October 2009, Françoise André, Jean-Louis Pazat, Olivier Barais (Triskell)

PhD in progress : Guillaume Gauvrit, Distributed Dynamic Adaptation of SBAs, October 2008, Françoise André, Jean-Louis Pazat

PhD in progress : André Lage, Dynamic Adaptation of Services on Distributed Infrastructures, October 2008, Nikos Parlavantzas, Jean-Louis Pazat

PhD in progress : Chen Wang, Using Chemical Metaphor to Express Workflow and Service Orchestration October 2009, Jean-Louis Pazat

PhD in progress : Héctor Fernández, Chemistry-inspired Workflow Management for Autonomic Service Composition, April 2009, Thierry Priol, Cédric Tedeschi

PhD in progress : Marco Obrovac, Large Scale Runtime of the Chemical Programming Model for Service Orchestration, January 2010, Thierry Priol, Cédric Tedeschi
9. Dissemination

9.1. Animation of the scientific community

- **Francoise Baude**
  Editorial board of the French national journal, Technique et Science Informatiques, Ed Lavoisier, since February 2011
  PC Member of ISPA’12
  Reviewer with Olivier Dalle of the PhD thesis of Pedro Velho, MESCOAL-EPI, July 2011.
  Reviewer of the PhD thesis of Louis Bouzonnet, SARDES-EPI, September 2011.
  Jury head of the PhD defense of Ketan Maheshwari, MODALIS team, I3S CNRS, January 2011.
  Member of the PhD committee of Frédérico Alvares, ASCOLA-EPI, from 2010, whose role is to monitor if the PhD work goes smoothly.
  Nominated member of the I3S CNRS laboratory council from November 2011. Replacement Head of the I3S CNRS laboratory ComRed. Member of the council of the “Sciences Informatiques” department at Polytech’Nice, from October 2011. Nominated as official representative for Univ of Nice Sophia-Antipolis in its participation as associate member in the EU EIT ICTLabs Knowledge and Innovation Community, from May 2011.
  Responsible for the setup and management of “Cordées pour la science à Sophia”, Polytech’Nice-Sophia, in partnership with INRIA Sophia-Antipolis Méditerranée, from autumn 2011

- **Francesco Bongiovanni**
  Reviewer for 6 conferences (4 international and 2 national), and one international journal.

- **Ludovic Henrio**
  Program Committee member of FESCA’11, FOCLASA’11, FESCA’12 and reviewer for the journal SCP (Science of Computer Programming).

- **Virginie Legrand**
  PC member of 2nd international workshop ManFed, at IM’12

- **Fabrice Huet**

- **Eric Madelaine**
  Steering committee member of FACS’11 and FMCO’11
  Program committee member of conferences FACS’11, and ICPP’11 and reviewer for the journal SCP (Science of Computer Programming)
  Guest Professor of East China Normal University (ECNU), Shanghai.

- **Cristian Ruz**
  Program Committee member of conferences ICAS 2012, SCCC 2011, and workshop WSDP 2011.

9.2. Teaching
Licence (ou équivalent): "Computer environment: introduction to operating system", 30 heures, L1, PeiP Polytech’Nice-Sophia.
Licence (ou équivalent): "Software Engineering", 24h, IUT Nice
Licence (ou équivalent): "Network Game Programming", 24h, IUT Nice
Master (ou équivalent): “Sémantique des Systèmes Distribués et Embarqués”, 12 heures, M1, Université de Nice Sophia-Antipolis, France.
Master (ou équivalent): “Distributed Algorithmics”, 24 heures, M2, Université de Nice Sophia-Antipolis, France.
Master (ou équivalent): "Programming of distributed applications", 42 heures, M1, Computer Science department Polytech’Nice-Sophia.
Master (ou équivalent): "Parallel and Distributed Programming”, 42 heures, M1, Computer Science department, Université de Nice Sophia-Antipolis, France.
Master (ou équivalent): "Distributed Systems”, 35 heures, M1, Computer Science department, Université de Nice Sophia-Antipolis, France.

PhD & HdR

PhD: Guilherme Peretti-Pezzi, “High Performance Hydraulic Simulations on the Grid using Java and ProActive”, Université de Nice Sophia-Antipolis, 15/12/2011, advisor Denis Caromel
PhD: Virginie Legrand-Contes, “Une approche à composants pour l’orchestration de services à grande échelle, Université de Nice Sophia-Antipolis, 15/12/2011, advisor Françoise Baude et Philippe Merle (ADAM EPI).
PhD in progress : Laurent Pellegrino “Pushing dynamic and ubiquitous event-based interaction in the Internet of services: a middleware for event clouds”, since Sept 2010, director Françoise Baude.
PhD in progress : Nuno Gaspar “Integrated, Autonomic, and Reliable Deployment and Management for SaaS composite applications”, since Nov 2011, Supervisor: Eric Madeleine
PhD in progress : Yanwen Chen, “Formal model and Scheduling for cyberphysical systems”, since Dec 2011, directors Eric Madelaine et Yixiang Chen (ECNU Shanghai)
PHOENIX Project-Team

9. Dissemination

9.1. Animation of the scientific community

Charles Consel has been involved in the following events as:

- Program Committee member of
  - ICWS 2011: IEEE International Conference on Web Services
  - EUC 2011: IEEE/IFIP International Conference on Embedded and Ubiquitous Computing
- Invited speaker at
  - NOTERE 2011: 11th annual International Conference on New Technologies of Distributed Systems
  - PEPM 2011: ACM SIGPLAN Workshop on Partial Evaluation and Program Manipulation
  - INS2I Scientific Council (invited talk on ambient computing) on September 29, 2011
  - Boulder University, Colorado, July 2011
- Guest Editor for the Annals of Telecommunications, Springer
- Member of the scientific committee on “GDR génie de la programmation du logiciel” (CNRS)
- Member of the steering committee of the International Conference on Generative Programming and Component Engineering (GPCE)
- Member of the IFIP WG 2.11 on Program Generation
- Member of the Inria working group on research and perspectives in the domain “Réseaux, systèmes et services, calcul distribué”
- French representative for IFIP TC2 "Software Theory and Practice"
- Member of the AERES evaluation committee of the I3S laboratory (UMR 6070), Sophia-Antipolis

Charles Consel has participated in the following thesis defense committees:

- Henner Jakob, June 27, University of Bordeaux, France
- Damien Cassou, March 17, University of Bordeaux, France
- Julien Mercadal, October 10, University of Bordeaux, France
- Adrienne Tankeu Choitat, December 16, University of Toulouse, France

Emilie Balland has been involved as in the following events as:

- Reviewer of the journal “Science of Computer Programming”
- Program Committee member of
  - WASDeTT 2011: 4th International Workshop on Academic Software Development Tools and Techniques
  - LDTA 2011: 11th Workshop on Language Descriptions, Tools and Applications (Co-located with ETAPS 2011)
  - DSL 2011: 2th IFIP Working Conference on Domain Specific Languages
- Local chair of
  - LDTA 2011: 11th Workshop on Language Descriptions, Tools and Applications
  - DSL 2011: 2th IFIP Working Conference on Domain Specific Languages
- Member of the Inria local committee on Popular Science Events
- Member of the IFIP WG 2.11 on Program Generation
Participation of the Phoenix Inria project team in the following events:

- "Les Rencontres du Numérique éducatif et culturel" on assistive technology for autistic children at school, March 2011
- “Fête de la science” (national popular science event), October 2011
- “Journées Eurêka” (regional popular science event), October 2011
- Rencontre Inria Idustries “Les sciences du numérique au service de la santé à domicile et de l’autonomie”, October 2011
- Signature of the convention on disability with FIPHFP (Fonds pour l’Insertion des Personnes Handicapées dans la Fonction Publique) by Inria, November 2011

9.2. Teaching

Teaching:

Master: Domain-Specific Languages, Charles Consel, 13 hours (M2 level), ENSEIRB engineering school, France.
Master: Telephony over IP, Charles Consel, 10 hours (M2 level), ENSEIRB engineering school, France.
Master: Domain-Specific Languages for Telephony Services, Charles Consel, 15 hours (M2 level), ENSEIRB engineering school, France.
Master: Architecture Description Languages, Charles Consel, 12 hours (M2 level), ENSEIRB engineering school, France.
Master: Software Development guided by modeling and verification, Emilie Balland, 20 hours (M2 level), ENSEIRB engineering school, France.

PhD & HdR:

PhD : Henner Jakob, “Vers la sécurisation des systèmes d’informatique ubiquitaire par le design : une approche langage”, University of Bordeaux, June 27, 2011, supervised by Charles Consel
PhD : Damien Cassou, “Développement logiciel orienté paradigme de conception : la programmation dirigée par la spécification”, University of Bordeaux, March 17, 2011, supervised by Charles Consel
PhD : Julien Mercadal, “Approche langage au développement logiciel : application au domaine des systèmes d’informatique ubiquitaire”, University of Bordeaux, October 10, 2011, supervised by Charles Consel
PhD in progress : Julien Bruneau, “Plateforme d’exécution paramétrable de systèmes communicants”, October 2008, supervised by Charles Consel
PhD in progress : Hongyu Guan, “Gestion de l’hétérogénéité des environnements ubiquitaires et de la consommation d’énergie des environnements mobiles”, started in February 2009, supervised by Charles Consel
PhD in progress : Pengfei Liu, “Politiques de securité pour les environnements ubiquitaires”, started in October 2009, supervised by Charles Consel
PhD in progress : Stéphanie Gatti, “Architecture en composants et qualification incrémentale”, started in February 2010, supervised by Charles Consel and Emilie Balland
PhD in progress : Quentin Enard, “Intégration de concepts de sûreté de fonctionnement dans un langage de description d’architecture et son support d’exécution”, started in February 2010, supervised by Charles Consel
PhD in progress : Luc Vercellin, “Prise en compte des concepts d’adaptation dans le développement d’applications d’assistance cognitive”, started in October 2011, supervised by Charles Consel and Emilie Balland
8. Dissemination

8.1. Animation of the scientific community

8.1.1. Conference organization

Program (co-)chairs

- Nathalie Mitton is/was program chair or co-program chair for WiSARN-Fall 2011 and IThings 2012.
- Xu Li is/was chair or co-chair for IoT-ET 2012, AdHoc-NOW 2011, WiSARN 2011-Spring, SCNC 2011.

Program committee members (TPC)

- Jean Carle is/was TPC member of AdHoc-Now 2011, PIMRC 2011, ANT 2011, IUPT 2011, IUPT 2012.
- Michael Hauspie is/was in a TPC member for MCCC 2011.
- Tahir Razafindralambo is/was a TPC member for MASS 2011, MSWIM 2011, PE-WASUN 2011.
- Isabelle Simplot-Ryl is/was a TPC member of ICC-AHSN 2012, ICC-WSN 2012, LCN 2011, ICC2011.

Publicity chair

- Nathalie Mitton was/is publicity chair of MASS 2011, AdHocNow 2011, SPECTS 2011 & 2012.
- Tahir Razafindralambo was publicity chair of AdHocNets 2011.

Misc

- Nathalie Mitton was poster chair of MobiHoc 2011.
- Tahir Razafindralambo was web chair of AdHocNow 2011.
- Xu Li was/is submission chair for MASS 2011.

8.1.2. Invited talks

- Tahir Razafindralambo was invited speaker at AdHocNow 2011 and gave a tutorial at WPMC 2011.
- Xu Li was invited speaker at University of Paderborn, Germany, Chinese Academy of Sciences, Beijing, China and Shanghai Jiaotong University, Shanghai, China.
- David Simplot-Ryl was invited speaker at WiSARN-Fall 2011.
8.1.3. Editorial activity

- Nathalie Mitton and Xu Li are editorial board members of AHSWN since 2011.
- Xu Li is editorial board member of Parallel and Distributed Computing and Networks since 2010.
- Xu Li is associate editor, European Transactions on Telecommunications since 2011
- Nathalie Mitton is guest editor for special issues in Eurasip journal (2011).
- Nathalie Mitton and Xu Li are guest editors of special issue in Springer PPNA (2011)
- Xu Li is guest editor of special issues in Elsevier’s COMCOM, JCM and AHSWN (2011)
- Jean Carle is/was reviewer for IJPEDS, IPL, TPDS.
- David Simplot-Ryl is involved in numerous international conferences and workshops (e.g. recently AdHocNets 2011, IEEE MASS 2011, IEEE INFOCOM 2011-2012) and in editorial activities (e.g. special issue in IEEE Network Magazine on the "Internet of Things" or member of associate editor of IEEE Transactions Parallel and Distributed Systems).

8.1.4. Misc

- Nathalie Mitton was/is member of the ANR programme blanc SIMI3 and expert for ANR ARPEGE program.
- Nathalie Mitton is a member of the Inria COST-GTAI.

8.2. Teaching

- Jean Carle
  DUT Informatique : Réseau, 74 h, L1, Université Lille 1, France
  Informatique : Structure de données, 32 h, L1, Université Lille 1, France
  Informatique : Réseau avancé, 86 h, L2, Université Lille 1, France
- Gilles Grimaud
  Licence Informatique : Réseaux, Niveau L3, 54h, Université de Lille 1
  Master Informatique : Architecture des Systèmes, Niveau M1, 64h, Université de Lille 1
  Master Informatique : Architecture des réseaux, Niveau M2, 20h, Université de Lille 1
  Master Informatique : Cryptographie Appliquée, Niveau M2, 12h, Université de Lille 1
  Master Informatique : Innovation et Initiation à la Recherche, Niveau M2, 12h, Université de Lille 1
  Master Informatique Enseignement a Distance : Cryptographie Appliquée, Niveau M2, 12h, Université de Lille 1
  Master Informatique Enseignement a Distance : Innovation et Initiation a la Recherche, Niveau M2, 12h, Université de Lille 1
- Michael Hauspie
  DUT Informatique : Programmation Système. Niveau L2, 72h. IUT A, Université Lille 1
  DUT Informatique : Introduction à l’OpenGL. Niveau L2, 3x24h. IUT A, Université Lille 1
  DUT Informatique : Projet tuteuré. Niveau L2, 16h. IUT A, Université Lille 1
  Licence Pro. RT-CGIR : Services Réseau. Niveau L3, 60h. IUT A, Université Lille 1
  Licence Pro. SIL-DA2I : Administration Système. Niveau L3, 35h. IUT A, Université Lille 1
- Samuel Hym
Licence : Initiation à la programmation impérative, 54h eqTD, L1, Université Lille 1, France
Licence : Automates et logiques, 28h eqTD, L2, Université Lille 1, France
Licence : Programmation système, 37,5h eqTD, L3, Université Lille 1, France
Licence : Programmation des systèmes, 38,5h eqTD, L3, Université Lille 1, France
Licence : Tutorat de stage en entreprise, 4h eqTD, L3, Université Lille 1, France
Licence : Tutorat d’alternance, 8h eqTD, L3, Université Lille 1, France
Master : Algorithmique Avancée, Complexité, Calculabilité, 30h eqTD, M1, Université Lille 1, France
Master : Administration système, 8h eqTD, M2, Université Lille 1, France

- Nathalie Mitton
  Licence : Transmission et protocoles 34H EqTD, L3, Université Lille 1, France
  Master : RFID Systems, 8H EqTD, M2, Université Lille 1, France
  Master : RFID and sensor networks, 8H EqTD, M2, Telecom Lille 1, France

- Tahiry Razafindralambo
  Licence : Introduction to Networking, 20h, L2, IUT A, Université Lille 1 - GEII, France.
  Master : Network architecture and technology, 12h, M2, Université Lille 1, France.
  Master : Networked Objects, 9h, M2, telecom Lille 1, France.
  Master : Networking, 20h, M2, Université Lille 1 - Master TIIR/Distance, France.

- Marie-Emilie Voge
  Licence : Responsabilité Pédagogique, 18 hEqTD, L2, université Lille 1, France
  Licence : Stage Unix, 6 hEqTD, L2, université Lille 1, France
  Licence : Algorithmes et Structures de Données, 36 hEqTD, L2, université Lille 1, France
  Licence : Algorithmique, 108 hEqTD, L2, université Lille 1, France
  Licence : Algorithmique, 69 hEqTD, L3, université Lille 1, France
  Master : Algorithmique Avancée et Complexité, 28 hEqTD, M1, université Lille 1, France

PhD & HdR :

HdR : Nathalie Mitton, INTERNET DES OBJETS, AUTO-ORGANISATION ET PASSAGE A L’ECHELLE, Université Lille 1, May 26th 2011
PhD : Alia Ghaddar, IMPROVING THE QUALITY OF AGGREGATION USING DATA ANALYSIS IN WSNS, Université Lille 1, December 2nd 2011, Tahiry Razafindralambo and Isabelle Simplot-Ryl
PhD : Jovan Radak, Algorithms for Realistic Wireless Sensor Networks, Université Lille 1, December 15th 2011, Nathalie Mitton
PhD in progress : Tony Ducrocq, Toward an unified RFID and wireless sensor network, December 1st 2010, Nathalie Mitton and Michael Hauspie
PhD in progress : Nicolas Gouvy, Geographical routing protocols for wireless sensor and actuator networks, September 1st 2010, Nathalie Mitton and David Simplot-Ryl
PhD in progress : Karen Miranda, Self deployment algorithms for mobile routers, January 1st 2011, Tahiry Razafindralambo and David Simplot-Ryl
PhD in progress : Milan Erdelj, Algorithm for Mobile Sensor Deployment, September 1st 2010, Tahiry Razafindralambo and David Simplot-Ryl
PhD in progress : Geoffroy Cogniaux, In place eXecution from serial memories, January 1st 2010, Gilles Grimaud and Michael Hauspie
8. Dissemination

8.1. Animation of the scientific community

Luciana Arantes is:

- Member of the program committee of the 6ème Conférence fran caise sur les systèmes d’exploitation, CFSE-6, Friburg, Switzerland, February 2008.
- Member of PC of Workshop de Sistemas Operacionais, SBC, Brésil, 2007-2010.
- Member of PC of WTF - Workshop of Fault Tolerance, Brésil, 2009-2011.
- Member of PC of International Conference on Grid and Pervasive Computing, 2009-2011.
- Member of PC of LADC - Fifth Latin-American Symposium on Dependable Computing 2011.
- Reviewer for JPDC and TPDS journals.

Bertil Folliot is:

- Member of the scientific committee of LIP6.
- Member of the “Executive Committee” of GdR ASR (Hardware, System and Network), CNRS.
- Elected member of the IFIP WG10.3 working group (International Federation for Information Processing - Concurrent systems).
- Member of the “Advisory Board” of EuroPar (International European Conference on Parallel and Distributed Computing), IFIP/ACM.
- Member of the “Steering Committee” of the International Symposium on Parallel and Distributed Computing”.
- Member of the program committee of the 10th International Symposium on Parallel and Distributed Computing (ISPDC 2011), Cluj-Napoca, Roumanie, juillet 2011.
- Member of the program committee of the 2011 International Conference on High Performance Computing & Simulation (HPCS 2011), Istanbul, Turquie, juillet 2011.
- Member of the program committee of the 9th International Conference on the Principles and Practice of Programming in Java (PPPJ 2011), Kongens Lyngby, Denmark, aout 2011.

Maria Potop-Butucaru is:

- Member of the program committee of SSS 2011(13th International Symposium on Stabilization, Safety, and Security of Distributed Systems)
- Member of the program committee of DISC 2011 (25th International Symposium on Distributed Computing)
- External member of the “Commission de specialistes” INSA Toulouse
- Reviewer for the PhD Thesis of Fouzi Mekhaldi, Universite Paris 11, Advisors Veronique Veque and Colette Johnen

Olivier Marin is:

- Reviewer for Distributed Computing, and Techniques et Sciences Informatiques.
- Elected vice-president of the “Conseil d’experts” of the Paris 6 University, section 27.
- Elected member of the “Commission des primes de recherche” of the Paris 6 University.
- Elected member of the “Commission des avancements de carrière - rang B” of the Paris 6 University.
- Member of the scientific committee of LIP6.
- Member of “Comité de selection” of Grenoble INP - ESISAR (Maitre de Conférences)
Sébastien Monnet is:
- Elected member of the administrative committee of LIP6.

Gilles Muller is:
- Member of the PC and co-organizer of the PLOS workshop, October 2011, Portugal, http://plosworkshop.org/2011/
- Member of the jury of the best European thesis on systems (EuroSys) 2011
- Member of PC of the 8ème Conférence francaise sur les systèmes d’exploitation, CFSE-8, May 2011 http://renpar.irisa.fr/CFP-CFSE.html
- Member of PC of the 5th EuroSys Doctoral workshop, Salzburg, April 2011
- Member of “Comité de sélection” of INSA de Lyon (Professeur) and University of Nice (Maitre de Conférence)
- Management Committee Substitute Member for the COST action ”Transactional Memories: Foundations, Algorithms, Tools, and Applications (Euro-TM)” and leader of the working group on ”Hardware’s and Operating System’s Supports”
- Reviewer for the University of Leuven
- Reviewer for the Swiss National Science Foundation

Julia Lawall is:
- Chair of the steering committee of Generative Programming and Component Engineering (2011, 2012)
- Secretary of IFIP TC2 (from 2011)
- Member of the editorial board of Science of Computer Programming
- Associate editor of Higher Order and Symbolic Computation
- PC member of 21st International Conference on Compiler Construction (CC 2012)
- PC member of Modularity: AOSD 2012
- PC member of OBT: Underrepresented Problems for PL Researchers, with POPL 2012
- Member of the Needham Award Review Committee (PhD dissertation award of EuroSys).
- Invited reviewer for PLDI 2012
- Member of IFIP WG 2.11 (Program Generation)

Franck Petit is:
- PC Member of Renpar 2011, 20th Rencontres francophones du Parallélisme, France, 2011.
- Invited Editor for ACM TAAS, Transactions on Autonomous and Adaptive Systems, Special Issue on Stabilization, Safety, and Security of Distributed Systems,
- Invited Editor for TCS, Theoretical Computer Science Special Issue on Stabilization, Safety, and Security of Distributed Systems,
- Member of scientific committee for the AREA evaluation of “INRIA Bretagne”.
- Member of “Vivier d’experts” of UPMC Paris 6.
Pierre Sens is:

- Local chair of Topic 8 “Distributed systems and algorithms” of EuroPar 2011
- co-Chair of P2P-Dep 2012 (1st Workshop on P2P and Dependability in conjunction with EDCC 2012)
- Member of PC of ICDCS 2012 (IEEE 32nd International Conference on Distributed Computing Systems)
- Member of PC of of EDCC’2012 (9th European Dependable Computing Conference)
- Member of ”Directoire de la recherche” of University Pierre et Marie Curie.
- vice-chair of LIP6 Laboratory.
- Member of the scientific council of AFNIC.
- Member of the scientific committee of LIP6.
- Member of the evaluation committee of the Digiteo DIM LSC program.
- Member of scientific committee of ANR project Blanc International.
- Member of ”Comité de selection” of Universities of Amiens, Grenoble, and Paris X.

Marc Shapiro is:

- Member of Advisory Board for CITI, the Research Center for Informatics and Information Technologies of UNL, the New University of Lisbon (Portugal).
- Member of the steering committee for the LADIS workshop (Large-Scale Distributed Systems and Middleware).
- Member of PC of EuroSys 2010.
- PC Chair of CFSE 2011, and member of PC of CFSE 2009 (Conférence française sur les systèmes d’exploitation).
- Promotion reviewer for various European universities (names confidential).
- Reviewer for European Research Council.
- Reviewer for ANR (Agence Nationale de la Recherche), France.
- Reviewer for National Science Foundation, Switzerland.
- Reviewer for USA-Israel Binational Science Foundation.
- Reviewer for Swedish Research Council.
- Reviewer for Springer Distributed Computing.
- Reviewer for IEEE Transactions on Parallel and Distributed Systems (TPDS).
- Member, ACM Distinguished Service Award Committee 2010.

8.2. PhD reviews

Bertil Folliot was part of the PhD committee of:

Gilles Muller was part of the committee of:
- Patrick Marlier. PhD. Univ. Neuchâtel, August 2011, Member.
- Laurent Réveillère. HDR. Univ. Bordeaux, November 2011, Member.
- Jean-Marc Menaud. HDR. école des Mines de Nantes, June 2011, Member.

Julia Lawall was part of the committee of:
- Laurent Réveillère. HDR. Univ. Bordeaux, November 2011, Member.

Franck Petit was member of thesis committees of:
- Lélia Blin, HDR LiP6, Commitee Chair
- Nicolas Hidalgo, PhD LiP6 (Advisors: P. Sens, L. Arantes, and X. Bonnaire), Commitee Chair
- Thomas Aynaud, PhD LiP6, (Advisors: M. Latapy, J-L. Guillaume), Commitee Chair

Pierre Sens was the reviewer of:
- P. Riteau. PhD. IRISA, (Advisor : C. Morin)
- W. Malvault. PhD LIG, (Advisors: JB. Stefani, V. Quema)

8.3. Teaching

- Luciana Arantes
  - Principles of operating systems in Licence d’Informatique, Université Paris 6
  - Operating systems kernel in Master Informatique, Université Paris 6
  - Distributed algorithms in Master Informatique, Université Paris 6
  - Responsible of Advanced distributed algorithms in Master Informatique, Université Paris 6
  - Unix system programming, Licence and Master d’Informatique, Université Paris 6

- Bertil Folliot
  - Head of the second year of professional Licence d’Informatique, Université Paris 6
  - Principles of operating systems in Licence d’Informatique, Université Paris 6
  - Responsible Advanced POSIX & C, Université Paris 6
  - Distributed algorithms and systems in Master Informatique, Université Paris 6
  - Distributed systems and client/serveur in Master Informatique, Université Paris 6
  - Projects in distributed programming in Master Informatique, Université Paris 6

- Maria Potop-Butucaru
  - Principles of Operating Systems, Licence d’Informatique, Université Paris 6
  - Distributed algorithms, Master d’Informatique, Université Paris 6
  - Resistance of Distributed Attacks, Master Paris 6, Network track
  - Embedded communicant systems, Master Paris 6, Network track

- Mesaac Makpangou
- Client/server architecture, Licence professionelle d’Informatique, Université Paris 6: TD, 16 heures

• Oliver Marin
  - Advanced operating systems programming, Master d’Informatique, Université Paris 6
  - Advanced distributed algorithms in Master Informatique, Université Paris 6
  - Responsible of operating systems programming, Licence d’Informatique, Université Paris 6
  - Parallel and distributed systems, Master d’Informatique, Université Paris 6
  - Responsible of the “Parcours professionnalisant L3 - Développeur d’Applications - Nouvelles Technologies (DANT)”
  - Responsible of Deployment of Cooperative Objects, Licence d’Informatique - parcours DANT, Université Paris 6

• Sébastien Monnet
  - Responsible of “Middleware for advanced computing systems in Master d’Informatique (2), Université Paris 6”
  - Responsible of System and Internet programmation in Licence d’Informatique (2), Université Paris 6
  - Operating systems kernel in Master Informatique (1), Université Paris 6
  - Principles of operating systems in Licence d’Informatique (3), Université Paris 6
  - Computer science initiation in Licence d’Informatique (1), Université Paris 6

• Pierre Sens
  - Responsible of “Principles of operating systems” in Licence d’Informatique, Université Paris 6
  - Responsible of “Operating systems kernel in Master Informatique”, Université Paris 6
  - Distributed systems and algorithms in Master Informatique, Université Paris 6

• Marc Shapiro
  - Teaches NMV (Noyaux Multi-cœurs et Virtualisation, i.e., multicore kernels and virtualisation) at Université Paris 6, Master 2.

• Gaël Thomas
  - Responsible for the Master 1 module “Systèmes Répartis Clients/Serveurs” in Master Informatique at the Univeristy Université Paris 6
  - Responsible for the Master 2 module “Middleware Orientés Composants” in Master Informatique at the Université Université Paris 6
  - Responsible for Master 2 module NMV (Noyaux Multi-cœurs et Virtualisation, i.e., multicore kernels and virtualisation)
  - Responsible for the Master 2 module “Répartition et Client/Serveur” in Master Informatique at the Université Université Paris 6
  - “Noyau des Systèmes d’exploitation” in Master Informatique at the Université Paris 6
  - “Systèmes” at PolyTech’ Paris
8. Dissemination

8.1. Animation of the scientific community

8.1.1. Examination Committees

Stéphane Ducasse was in the examination committee of the following PhD theses:

- *Package Dependencies Analysis and Remediation in Object-Oriented Systems*, Jannik Laval, University of Lille-1, France. 17/06/11 (advisor).
- *Analyse et optimisation de patterns de code*, Rim CHAABANE, University Paris VIII, France. 14/09/2011 (reporter)

Nicolas Anquetil was in the examination committee of the following PhD theses:

- *Package Dependencies Analysis and Remediation in Object-Oriented Systems*, Jannik Laval, University of Lille-1, France. 17/06/11 (co-advisor).
- *Analyse et optimisation de patterns de code*, Rim CHAABANE, University Paris VIII, France. 14/09/2011

8.1.2. Scientific Community Animation

Stéphane Ducasse has been/is:

- Associate Editor of JOT (Journal of Object Technology).
- Reviewer for the following journals:
  - IEEE Transactions on Software Engineering (TSE),
  - ACM Transactions on Software Engineering and Methodology (TOSEM),
  - Journal on Software Maintenance and Evolution (JSME),
  - Journal of Systems and Software (JSS),
  - IEEE Software,
  - International Journal on Information and Software Technology (IST)
- Member of the following committees:
  - International Conference on Software Maintenance (ICSM).
  - International Conference on Objects, Models, Components, Patterns (TOOLS).
  - Program Chair of the International Smalltalk Conference.
  - IEEE International Workshop on Visualizing Software for Understanding and Analysis (VISSOFT 11)

Nicolas Anquetil was:

- Reviewer for the following journals:
  - Journal of Systems and Software (JSS);
  - Software Quality journal (SQJ);
  - Empirical Software Engineering (EMSE);
  - Journal of Object Technology (JOT);
  - Journal of the Brazilian Computer Society (JBCS).
- Member of the following committees:
  - International Conference on Software Maintenance (ICSM).
  - European Conference on Software Maintenance and Reengineering (CSMR).
- Co-organizer for the *Journées nationales IDM, CAL, and GDR/GPL* (June 2011).
Marcus Denker has been/is:

- PC Member ICSE 2012 Tool Demonstration (International Conference on Software Engineering)
- PC Member Varicomp 2011 (2nd International Workshop on Variability and Composition)
- PC Member AOSD 2011 (9th Annual Aspect-Oriented Software Development Conference)
- PC Member RAM-SE 2011 (ECOOP Workshop on Reflection, AOP, and Meta-Data for Software Evolution)
- PC Member IWST 2011 (ESUG International Smalltalk Workshop)
- Reviewer TOOLS 2011 (International Conference Objects, Models, Components, Patterns)

Damien Pollet has been/is:

- Co-organizer for the *Journées nationales IDM, CAL, and GDR/GPL* (June 2011).
- Maintainer of the LaTeX style files for submissions to the Journal of Object Technology.

### 8.2. Teaching

Marcus Denker gave a lecture about Reflection and Context at Université catholique de Louvain, March 2011.

Stéphane Ducasse teaches a course on advanced OO design in the Master of IMUS (University of Savoie) and a course on metamodelling and reflective systems at Ecole des Mines de Douai.

Damien Pollet organizes and teaches bachelor and master-level courses on algorithms, programming in C and Java, object-oriented design, remote objects and web applications at the engineering school Telecom Lille 1.

Nicolas Anquetil teaches at the IUT (Institut Universitaire Technologique) of Lille 1, courses on Graphical User Interface programming with Java and Software Quality and Tests.

Jean-Baptiste Arnaud and Jannik Laval are teaching assistants (moniteur) at the IUT.
8. Dissemination

8.1. Animation of the scientific community

- J.B. Stefani is a member of the Programme Committee of the ACM SAC 2012 international conference, and a member of the editorial board of the international journal Annals of Telecommunications.
- J.B. Stefani is a member of the Technology Council of STMicroelectronics.
- V. Quêma was the Organizer of the fourth edition of the Winter School on Hot Topics in Distributed Computing.
- V. Quêma was a PC member for SRDS, AlgoTel, CFSE and CSE.
- A. Schmitt is a member of the steering committee of the Journées Françaises des Langages Applicatifs (JFLA).
- D. Pous is on the program committee of the Journées Françaises des Langages Applicatifs (JFLA).
- N. de Palma organized the first workshop of green computing middleware that was associate to the middleware conference MW 2011.
- N. de Palma was a PC member for the CFSE conference and ICAS conference.
- S. Bouchenak is a member of the program committee of the International Workshop on Cloud Computing Platforms, CloudCP 2011, of INFOCOMP 2011 and of CFSE 2011.
- S. Bouchenak is a co-General Chair of CFSE/RenPar/SympA conferences, 2013.
- S. Bouchenak and E. Rutten co-organize Seminars on the application of control theory and mathematical optimization to distributed system control, LIG laboratory, June and September 2011. \url{http://sardes.inrialpes.fr/~bouchena/seminars/2011-06-07-LIG/index.html}
- E. Rutten organized a one-day workshop on Automatique pour l’informatique autonome, satellite of MSR 2011, 15 nov. 2011 \url{http://proton.inrialpes.fr/~rutten/peps-api/peps-api-MSR11.html}
- Fabienne Boyer is in the program committee of the Green Computing Middleware (GCM’2011) workshop and of the Workshop on Middleware and Architectures for Autonomic and Sustainable Computing (MAASC’2011).

8.2. Teaching

V. Quêma is a full-time professor at Grenoble INP, since sept. 2011.
Noël de Palma is a full-time professor at Grenoble University.
Olivier Gruber is a full-time professor at Grenoble University.
Olivier Gruber is the head of the Parallel, Distributed, and Embedded Systems track in the international Master of Science in Informatics at Grenoble (MOSIG).
Renaud Lachaize is a full-time lecturer at Grenoble University.
Sara Bouchenak is a full-time lecturer at Grenoble University.
Fabienne Boyer is a full-time lecturer at Grenoble University.
Fabienne Boyer is the head of the M2PGI (Master Professionnel Génie Informatique) Alternance at Grenoble.
A. Schmitt is teaching a Bachelor level course on Computational Models at U. Joseph Fourier.
D. Pous and A. Schmitt are teaching the Proof Assistant: from Theory to Practice course at the MSTII Doctoral School (U. Grenoble).
D. Pous is teaching a Bachelor level course on Natural Deduction at U. Joseph Fourier.

HdR : Alan Schmitt, Static Analyses for Manipulations of Hierarchically Structured Data, may 2011.
PhD : Alessio Pace, "Gossiping in the wild – Tackling practical problems faced by gossip protocols when deployed on the Internet", Grenoble University, October 2011, V. Quéma, JB Stefani.
PhD : Willy Malvault, "Vers une architecture pair-à-pair pour l’informatique dans le nuage", Grenoble University, October 2011, V. Quéma, JB Stefani.
PhD in progress : Claudio Mezzina, "Reversibility in the higher-order π-calculus", Feb. 2012, J. B. Stefani.
PhD in progress : Quentin Sabah, "Isolated actors for multi-core programming", Grenoble University, exp. May 2013, J. B. Stefani.
PhD in progress : Xin An (U. Grenoble), "Discrete control and design space exploration for reconfigurable architectures", started in sept. 2010, adv. E. Rutten and A. Gamatié (INRIA Lille).
PhD in progress : Sébastien Guillet (UBS, Lorient), "Control and decision for dynamically partially reconfigurable FPGA architectures", started in dec. 2009, adv. F. de la Motte (Lorient) and E. Rutten.
9. Dissemination

9.1. Animation of the scientific community

- Khalid Benali has been PC member of I-ESA 2011, INFORSID 2011 and of several workshops.
- Nacer Boudjlida is a member of the prime board of the program committee of CAISE (Computer Assisted Information Systems) 2011, I-ESA’2010 and I-ESA’2012 (International Conference on Interoperability of Enterprise Systems and Applications). He also acts for several years as a PC member for many international conferences and workshops (CAiSE, COOP’IS, EMMSAD, SHIE, WWS, etc.). He acted as a co-organizer and a co-scientific editor of the workshops and the doctrinal symposium of I-ESA’2010. He was also a reviewer for the Entreprise Information Systems Journal and for a special volume of Springer LNBIP (Lecture Notes in Business Information Processing series).
- Gérôme Canals is the co-chair of the "Mobilité et Ubiquité” french national working group (GDR I3).
- François Charoy has been PC member of ICEBE (International Conference on Business Engineering) 2011, 4th European Conference ServiceWave (Industry Track), CTS 2011 (International Symposium on Collaborative Technologies and Systems), DG.O (International Conference on Digital Government Research) 2011, CEC 2011 (IEEE Conference on Commerce and Electronic Computing), ACIS (Australasian Conference in Information Systems) 2011, WISE 2011 (International Conference on Web Information System Engineering) and of several workshops. He is member of the editorial board of the Service Oriented Computing and Applications Journal (Springer). He was co-chair of the Collaborative Technology for Coordinating Crisis Management Track at WETICE 2011
- Jacques Lonchamp has been or is PC member of CSEDU (International Conference on Computer Supported Education) 2011, ICALT (International Conference on Advanced Learning Technologies) 2011, . He reviewed papers for ”Journal of Computer-Supported Collaborative Learning”, “Computers & Education”, ”Interacting With Computers”, ”Internet and Enterprise Management”, ”International Journal of Distance Education Technologies”. 
• Gérald Oster was a PC member of CoopIS 2011 (International Conference on Cooperative Information Systems). He reviewed papers for “Computer Supported Cooperative Work” and “Entreprise Information Systems” journals.

• Olivier Perrin has been Program Committee member of PALS (Process-Aware Logistics Systems) workshop of BPM 2011, Qasba (Quality Assurance for Service-based applications) workshop of ECOWS 2011, GRCIS workshop 2011). He reviewed in 2011 papers for IEEE Transactions on Services Computing and Software and Systems Modeling journals. He also gave a tutorial at BPM 2011 enterprise day.

• François Charoy is member of the Administration Council of University Henri Poincaré Nancy 1 and of ESIAL.

• Pascal Urso is member of the Scientific Council of University Henri Poincaré Nancy 1.

• Claudia-Lavinia Ignat is member of the INRIA Nancy-Grand Est COMIPERS researchers committee. She is member of the INRIA Nancy-Grand Est center committee. She was interim leader of the SCORE team in the period February-August 2011 during the leave of François Charoy at NICTA.

• Gérald Oster is member of the Administration Council of ESIAL.

• Gérôme Canals is member of the Administration Council of Nancy University Institute of Technology (IUT Nancy Charlemagne).

• Boudjlida Nacer is a member of the Council (“Conseil”) of the Scientific and Technology Faculty (FST) of the University Henri Poincaré Nancy 1 as he is a member of the council of the scientific sector MIAE (Mathematics, Informatics, Atomic, Electronic) of that FST.

SCORE members were member of the following PhD defense committees:

- Joern Franke, PhD, Université Henri Poincaré Nancy 1, October 2011 (François Charoy)
- Virginie Legrand Contes, PhD, Université de Nice, Décembre 2011 (François Charoy)
- Adeel Ahmad, PhD, Université du littoral côte d’Opale, December (Claude Godart)
- Issam Bouslimi, PhD, Université de Toulouse 1, June 2011 (Claude Godart)
- Thibault Cholez, PhD, Université Henri Poincaré Nancy 1, June 2011 (Claude Godart)
- Walid Fdhila, PhD, Université Henri Poincaré Nancy 1, October 2011 (Claude Godart)
- Mohamed-Anis Mekki, PhD, Université Henri Poincaré Nancy 1, December 2011 (Claude Godart)
- Ehtesham Zahoor, PhD, Université Nancy 2, November 2011 (Claude Godart, Olivier Perrin)
- Chantal Cherifi-Bonner, PhD, Université de Corse Pascal Paoli, December 2011 (Nacer Boudjlida)
- Muntaz Ahmad, PhD, Université Henri Poincaré Nancy 1, November 2011 (Nacer Boudjlida)

SCORE members were members of the following Habilitation defense committee:

9.2. Teaching

SCORE members have important responsibilities and are leading teachers in several cursus in Nancy University (University Henri Poincaré Nancy 1, University Nancy 2 and INPL), at different levels, including Masters (ESIAL, ESSTIN, research and professional masters). Some members have also a lecturing activity with international partners (Algeria, Morocco, Lebanon) at the Master’s degree level. It would be too long to detail all the lectures for which Score members are responsible. In 2010/2011, members of the Score team have delivered more than 2000 hours of lectures to which can be added other activities like internship and project supervising.

• Nacer Boudjlida is the head of the Computer Science department of the Faculty of Sciences and technologies, UHP Nancy 1.
• Gérôme Canals is the head of the Computer science department of the Nancy University Institute of Technology (IUT Nancy Charlemagne), and is responsible for the professional licence degree "Web application programming" since sept. 2011.

• Jacques Lonchamp is responsible for the professional licence degree "Free and Open Source Software".

• Claude Godart is responsible for the Computer Science department of ESSTIN. He is study director of the research and professional master degree "Distributed Services, Security and Networks".

• Khalid Benali is responsible for the professional Master degree speciality "Distributed Information Systems" of MIAGE and of its international branch in Morocco.

• Olivier Perrin was responsible for the professional licence degree "Web application programming" until august 2011, and is now responsible of the Certificat Informatique et Internet (C2I) for University Nancy 2.

• François Charoy is responsible of the Software Engineering specialisation at the ESIAL Engineering School of University Henri Poincaré Nancy 1.

• Gérald Oster is responsible of the 3rd year internship program at the ESIAL Engineering School of University Henri Poincaré Nancy 1.

PhD & HdR :

PhD : Joern Franke, Coordination des activités réparties dans des situations dynamiques : le cas de la gestion de crise inter-organisationnel, Université Henri Poincaré Nancy 1, October 2011 (François Charoy)

PhD: Ehtesham Zahoor, Gouvernance de service: aspects sécurité et données, Université de Nancy 2, November 2011 (Olivier Perrin)

PhD: Walid Fdhila, Décentralisation Optimisée et Synchronisation des Procédés Métiers Inter-Organisationnels, Université Henri Poincaré Nancy 1, October 2011 (Claude Godart)

PhD: Aymen Baouab, Distribution de processus interentreprises basée sur une architecture orientée services en respectant les politiques de sécurité, Université Henri Poincaré Nancy 1 (Olivier Perrin)

Phd: Luc André, Réplication optimiste, Université Henri Poincaré Nancy 1 (François Charoy, Gérald Oster)

Phd: Medhi Ahmed Nacer, CRDT et nouveaux types de donnés, Université Henri Poincaré Nancy 1 (François Charoy, Pascal Urso)
9. Dissemination

9.1. Animation of the scientific community

9.1.1. Journals

9.1.1.1. Jean-Marc Jézéquel

is an Associate Editor of the following journals:

- IEEE Computer
- Journal on Software and System Modeling: SoSyM
- Journal of Systems and Software: JSS
- Journal of Object Technology: JOT

9.1.2. Examination Committees

9.1.2.1. Jean-Marc Jézéquel

was in the examination committee of the following PhD thesis and “Habilitation Diriger les Recherches”:

- Pierre Duquesne, January 2011, Université de Rennes 1 (president);
- Mariano Belaunde, January 2011, Université de Rennes 1 (adviser);
- Benoît Caillaud (HDR), March 2011, Université de Rennes 1 (president);
- Jannik Laval, June 2011, Université de Lille 1 (referee);
- Mathieu Acher, September 2011, Université de Nice (referee);
- Yves Le Gloahec, October 2011, Université de Bretagne Sud (referee);
- Hakim Hannousse, November 2011, Ecole des Mines de Nantes (member);
- Stéphane Lecomte, November 2011, Université de Rennes 1 (president);
- Grégory Nain, December 2011, Université de Rennes 1 (adviser);
- Maha Driss, December 2011, Université de Rennes 1 (adviser), co-tutelle with Tunisia;
- Mickael Clavreul, December 2011, Université de Rennes 1 (adviser);

9.1.2.2. Benoît Baudry

was in the examination committee of the following PhD thesis:

- Xavier Dumas, March 2011, Telecom Bretagne (member)
- Hakim Belhaouari, September 2011, Université de Pau et Pays de l’Adour (referee)
- Bastien Amar, October 2011, Université Paul Sabatier (referee)
- Ha Nguyen, October 2011, Université de Nantes (referee)
- Vincent Aranega, November 2011, Université de Lille 1 (referee)

9.1.2.3. Olivier Barais

was in the examination committee of the following PhD thesis

- Grégory Nain, December 2011, Université de Rennes 1 (co-adviser)
- Mickael Clavreul, December 2011, Université de Rennes 1 (co-adviser)
9.1.3. Conferences

9.1.3.1. Jean-Marc Jézéquel

has been a member of the program committee of the following conferences:

- ECOOP 2011, Lancaster, UK, 25th - 29th July 2011
- VaMoS 2011 Namur, Belgium, 24th - 26th January 2011

9.1.3.2. Benoit Baudry

has been a member of the program committee of the following conferences:

- MODELS 2011 The 14th International Conference on Model Driven Engineering Languages and Systems Wellington, NZ, October 2011
- IEEE ICST’11 The 4th International Conference on Software Testing Verification and Validation, Berlin, Germany, March 2011
- SC’11, International Conference on Software Composition, Zurich, CH, June 2011
- TAP’11, 5th International Conference on Tests & Proofs, Zurich, CH, June 2011
- AGTIVE’11, Applications of Graph Transformation With Industrial Relevance, Budapest, Hungary, October 2011
- AST workshop on Automated Software Testing, at ICSE’11, Honolulu, USA, May 2011
- MoDeVVa 2011, 8th international workshop on Model design and Validation at MODELS’10, Wellington, NZ, October 2011
- Mutation’11 workshop at ICST’11, Berlin, Germany, March 2011
- CSTVA’11 workshop at ICST’11, Berlin, Germany, March 2011
- Revvert’11 workshop at ICST’11, Berlin, Germany, March 2011
- SEKE’11, International Conference on Software Engineering and Knowledge Engineering, Miami, USA, July 2011

9.1.3.3. Olivier Barais

has been a member of the program committee of the following conferences:

- The 37th EUROMICRO Conference on Software Engineering and Advanced Applications SEAA2011, August 30 to September 2, 2011, Oulu, Finland
- 4nd Workshop on Context-aware Adaptation Mechanisms for Pervasive and Ubiquitous Services, (CAMPUS’11), 9th June 2011, Reykjavik, Iceland

9.1.3.4. Noël Plouzeau

has been a member of the program committee of the following conferences and workshops:

- Component Based Software Engineering (CBSE), july 2011.

9.1.3.5. Benoit Combemale

has been a member of the program committee of the following conferences and workshops:

- The Eighteenth Asia-Pacific Software Engineering Conference (APSEC 2011)
- The Industry Track of Software Language Engineering (ITSLE 2011)
- The Seventh European Conference on Modelling Foundations and Applications (ECMFA 2011)
- The Seventh Educators’ Symposium @ MODELS 2011
- 7ièmes Journées sur l’Ingénierie Dirigée par les Modèles (IDM 2011)
- The MDE track of INFORSID 2011.
9.1.3.6. Gerson Sunyé

has been a member of the program committee of the following conference:

- The 23rd International Conference on Software Engineering and Knowledge Engineering (SEKE 2011).

9.1.3.7. Johann Bourcier

has been a member of the program committee of the following workshop:

- The Workshop on Software Product Line Development in Dynamic Adaptive Environments at ECOOP 2011

9.1.4. Workshops, Tutorials and Keynotes

J.-M. Jézéquel gave an invited talk on Hyper-agility of Human-Computer Interactions at IHM 2011 (Conférence Francophone sur l’Interaction Homme-Machine), on Hyper-agility of SOA at the Dagstuhl seminar on Models.at.runtime, and an invited seminar at the University of Luxembourg.

Benoit Combemale gave two invited talks on Model Typing for Model Transformation Reuse and Model Validation & Verification at King’s College London. He was invited to participate at the 2011 Bellairs CAMPaM (Computer Automated Multi-Paradigm Modelling) workshop (a workshop taking the Dagstuhl seminar format).

Benoit Baudry gave a keynote on mutation analysis from objects to the cloud at the Mutation workshop associated with ICST’2011. He also gave an invited talk at King’s College London on Model Validation & Verification and at Université de Luxembourg on search-based software engineering for adaptive systems.

9.2. Miscellaneous

- J.-M. Jézéquel is Deputy Director of MATISSE Doctoral School. He is head of the Language and Software Engineering Department at Irisa. He is appointed to the board of the Committee of Projects of INRIA Rennes, and to the executive board of the Labex CominLabs. He is a member of the Steering Committee of the AOSD Conference series.
  He is a member of the Scientific Committee of the GDR GPL of CNRS. He belongs to the evaluation committee of the SIO division of DGA (Direction Générale de l’Armement). He is a Member of the Architecture Board of the MDDi Eclipse project. He participated to the creation of IFIP WG 10.2 on Embedded Systems. He is a member of the Advisory Board of the NSF REMODD Project (Repository for Model Driven Development).
- Benoit Baudry is on the steering committee of the IEEE International Conference on Software Testing Verification and Validation. He has been the local organizing chair for AOSD’10.

9.3. Teaching

The Triskell 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, Benoit Combemale, Johann Bourcier and Arnaud Blouin teaches about 200h in these domains, with Benoit Baudry teaching about 50h, for a grand total of about 1400 hours, including several courses at ENSTB, Supelec and ENSAI Rennes.

Olivier Barais is the overall responsible for the Master2 Pro in Computer Science at the University of Rennes.

Benoit Combemale has published and presented an article on teaching MDE at the 7th international Educators’ Symposium at MODELS 2011 (the international symposium about software modeling in education) [43]. In this work, we report our experience on the dissemination in education of the research results in MDE. Benoit Combemale will be also co-chair of the 8th Educators’ Symposium at MODELS 2012.
Jean-Marc Jézéquel, Benoit Combemale, and Didier Voitisek have disseminated from research to teaching their experience in MDE by writing a book in french published by Ellipses [48].

The Triskell team also receives several Master and summer trainees every year.

PhD & HdR:

PhD: Mickael Clavreul, *Composition of models and meta-models: Separation of correspondences and interpretations for unifying existing model composition approaches*, Université Rennes1, 12/05/11, J.-M. Jézéquel and Olivier Barais [13]

PhD: Maha Driss, *Approche multi-perspective centrée exigences de composition de services Web*, Université Rennes1 and Université de Sfax, 12/08/11, J.-M. Jézéquel [14]

PhD: Grégory Nain, *EnTiMid: a component model to integrate smart devices in service based applications*, Université Rennes1, 12/07/11, J.-M. Jézéquel and Olivier Barais [15]

PhD: Mariano Belaunde, *Le Développement Agile de Services de Télécommunication Intégrés via des techniques d’ingénierie des modèles*, Université Rennes1, 20/01/11, J.-M. Jézéquel [12]

PhD in progress: Olivier Bendavid, *Security for Future Internet*, October 2010, Benoit Baudry and J.-M. Jézéquel

PhD in progress: Slim Benhassem, *Dynamic adaptation of multimodal interactions in the context of ubiquitous environments*, December 2008, J.-M. Jézéquel and Arnaud Blouin

PhD in progress: Juan Jose Cadavid Gomez, *Assisting Metamodeling with Search Based Techniques*, 10/02/09, Benoit Baudry and J.-M. Jézéquel

PhD in progress: Stephen Creff, *Une variabilité multidimensionnelle pour une évolution incrémentale des lignes de produits dirigées par les Modèles*, May 2009, J.-M. Jézéquel

PhD in progress: Erwan Daubert, *Adaptation environnementale de services sur des plates-formes distribuées large échelle*, November 2009, Olivier Barais

PhD in progress: Joao Bosco Ferreira-Filho, *Variability Management in Model-driven Software and System Engineering*, October 2011, Benoit Baudry and Olivier Barais

PhD in progress: François Fouquet, *Un modèle pour les systèmes distribués dynamiquement adaptables*, October 2009, J.-M. Jézéquel and Noël Plouzeau

PhD in progress: Clément Guy, *Generic Definition of Domain Specific Analysis using Model-Driven Engineering (MDE)*, October 2010, J.-M. Jézéquel and Benoit Combemale

PhD in progress: Aymeric Hervieu, *Génération de test sur les lignes de produits logicielles*, October 2010, Benoit Baudry


PhD in progress: Jonathan Marchand, *Engineering Semantics in Modeling Languages*, October 2011, Benoit Baudry and Benoit Combemale

PhD in progress: Antonio Mattos, *Synthesis of Service-oriented Architectures by Model Transformation*, December 2011, Noël Plouzeau and Olivier Barais


PhD in progress: Suresh Pillay, *Validating Web Service Composition*, October 2011, Benoit Baudry and Benoit Combemale


PhD in progress: Hamza Samih, *Extension du model-based testing pour la prise en compte de la variabilité et la sécurité dans les systèmes complexes*, November 2011, Benoit Baudry

PhD in progress: Nicolas Sannier, *Ingénierie des modèles pour la gestion des référentiels d’exigences de sûreté pour les systèmes de contrôle-commande*, October 2010, Benoit Baudry
9. Dissemination

9.1. Animation of the scientific community

9.1.1. Editorial Activities

Since October 2001, Jens Gustedt is Editor-in-Chief of the journal *Discrete Mathematics and Theoretical Computer Science* (DMTCS). DMTCS is a journal that is published electronically by an independent association under French law. Based on a contract with INRIA, its main web-server is located at the LORIA. DMTCS has acquired a good visibility within the concerned domains of Computer Science and Mathematics, which is confirmed by a relatively high impact factor. This year, DMTCS published a special issue and proceedings volumes of noticeable events in the domain.

In 2011, Jens Gustedt has served as program committee member of the 20\textsuperscript{th} Euromicro International Conference on Parallel, Distributed and network-based Processing (PDP 2012), of the 3\textsuperscript{rd} Workshop on Complex Networks (CompleNet 2012) and of the 2\textsuperscript{nd} RenPar (RenPar 2011).

Lucas Nussbaum was member of the organization and program committee for the Grid’5000 Spring School 2011.

Martin Quinson has served as program committee member of the 6\textsuperscript{th} International Workshop on Modeling, Simulation, and Optimization of Peer-to-peer environments (MSOP2P 2012, associated to Euromicro PDP 2012).

Stéphane Genaud was member of the program committee of the 13\textsuperscript{th} IEEE International Conference on High Performance Computing and Communications, HPCC 2011.

Stéphane Vialle was member of the twentieth RenPar conference committee ("Rencontres francophones du Parallélisme") (RenPar 2011). Stéphane Vialle was also member of the program committee of the international conference on Architecture of Computing Systems (ARCS 2011 and ARCS 2012).

9.1.2. Refereeing

In 2011, members of the team served as referees for the following journals and conferences:

- **Journals**: Concurrency and Computation: Practice and Experience, Eurasip journal on Image and Video Processing, Journal of Parallel and Distributed Computing, Parallel Computing, Engineering Applications of Artificial Intelligence, Neural Networks
- **Projects**: Sylvain Contassot-Vivier is expert for the MEI funding program.

9.1.3. Scientific Expertise

In 2011, our team members participated to following thesis committee:

- Stéphane Genaud, rapporteur, Fabrice Dupros, University of Bordeaux 1, France.
- Jens Gustedt, president, Tom Leclerc, University Henri Poincaré, France
- Martin Quinson, member, Ahmed Harbaoui, University of Grenoble, France.
- Martin Quinson, member, Bogdan Cornea, University of Franche-Comté, France.
- Sylvain Contassot-Vivier, member, Lucian Alecu, UHP University - Nancy 1, France.
- Sylvain Contassot-Vivier, member, Rémy Laurent, University of Franche-Comté, France.
- Sylvain Contassot-Vivier, member, Dawood Khan, INPL, France.
- Sylvain Contassot-Vivier, member, Emmanuel Benard, University of Strasbourg, France.
Our members were also members of the following recruiting committees:

Jens Gustedt, full professor position, University of Franche-Comté, France.
Jens Gustedt, assistant professor position, University of Franche-Comté, France.
Martin Quinson, assistant professor position, University of Nancy I.
Martin Quinson, assistant professor position, University of Bordeaux.

9.1.4. Invitations and participations to scientific events

Stéphane Vialle was invited to participate to a panel about Graphical Processing Units (GPUs): Opportunities and Challenges at the 2011 International Conference on High Performance Computing & Simulation (HPCS’2011), Istanbul, Turkey.

Martin Quinson was invited to give a presentation entitled H*C: Performance Everywhere (or, computing getting high) at the workshop “Challenges & Pitfalls of Performance Assurance”, associated to CECMG’11 in München, Germany in March 2011.

Lucas Nussbaum was invited to give the following talks:

- Towards better experiments on Grid’5000 at Journée Grid’5000 aux Rencontres francophones du Parallélisme (RenPar’20), Saint-Malo
- Grid’5000, a scientific instrument for experiment-driven research on parallel, large-scale and distributed systems at Support for Experimental Computer Science Workshop at SC 11, Seattle
- Towards better tools for experiments on distributed systems at Support for Experimental Computer Science Workshop at SC 11, Seattle

Constantinos Makassikis was invited to give a presentation entitled A Skeletal-Based Approach for the Development of Fault-Tolerant SPMD Applications during the “Seconde journée du groupe de travail LaMHA (Langages et Mod’es de Haut-niveau pour la programmation parallèle, distribuée, de grilles de calcul et Applications)”, December 2010.

9.1.5. Scientific Mediation

Martin Quinson acts as a member to the INRIA-Nancy Grand Est committee for Scientific Mediation. He also participated alongside with Thomas Jost and Sébastien Badia to the LORIA and INRIA-Nancy Grand Est stand at the “Fête de la Science”, proposing several activities to demonstrate the algorithmic thinking at the core of the Computer Science without requiring any computer or even electric devices.

9.2. Teaching

Participants: Sylvain Contassot-Vivier, Jens Gustedt, Constantinos Makassikis, Lucas Nussbaum, Martin Quinson, Stéphane Vialle.

DUT Informatique (S1): System (40h), L1, Univ. Nancy 2, France
DUT Informatique (S2): Networks (30h), L1, Univ. Nancy 2, France
DUT Informatique (S1bis): Computer architecture (36h), L1, Univ. Nancy 2, France
DUT Informatique (S1): Introduction to algorithmic (40h), L1, Univ. Nancy 2, France
DUT Informatique (S1): Basic programming (48h), L1, Univ. Nancy 2, France
DUT Informatique (AS): Networks (70h), L2, Univ. Nancy 2, France
DUT Informatique (AS): Algorithmic (42h), L2, Univ. Nancy 2, France
DUT Informatique (S2): Object programming (32h), L1, Univ. Nancy 2, France
Licence pro ASRALL: Installation of Linux (20h), L3, Univ. Nancy 2, France
Licence pro ASRALL: Administration of applications (24h), L3, Univ. Nancy 2, France
Licence: Scientific computing (22h), L3, UHP University, France
Licence: Algorithmic and programming (40h), L3, UHP University, France
Licence (1st year engineer): Programming techniques and tools (44h), L3, ÉSIAL, UHP University, France
Licence (1st year engineer): C and Shell programming (44h), L3, ÉSIAL, UHP University, France
Master 1: Algorithmic and complexity (14H), M1, UHP University, France
Master 1: Algorithmic of distributed systems (24H), M1, UHP University, France
Master (2nd year engineer): Networks and systems, System part (25h), M1, UHP University, France
Master (2nd year engineer): Algorithmic of parallel and distributed systems (32H), M1, ÉSIAL, UHP University, France
Master (2nd year engineer): Information System, SUPELEC, Paris, France
Master projects (2nd year engineer): Software Development project, SUPELEC, Metz, France
Master 2: Communicating systems (24h), M2, UHP University, France
Master 2 IMOI: Networks (23H), M2, UHP University, France
Master 2 RISE: Distributed Systems and Grids, Strasbourg University, France
Master 2 ILC: Parallelism, Distributed Systems and Grids, Strasbourg University, France
Master (3rd year engineer): High Performance Computing, SUPELEC, Metz, France
Master (3rd year engineer): High Performance Computing, SUPELEC, Paris, France
Master projects: (14H), M2, UHP University, France
Master projects (3rd year engineer): Industrial project, SUPELEC, Metz, France

In addition, Martin Quinson authored a pedagogic platform in collaboration with Gérald Oster (Score team of INRIA Nancy Grand Est). 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. It is available from its page. Its advantages for the learning process are described in [32].

9.3. Advising
Participants: Sylvain Contassot-Vivier, Jens Gustedt, Lucas Nussbaum, Martin Quinson, Stéphane Vialle.

PhD: Constantinos Makassikis, Conception d’un modèle et de frameworks de distribution d’applications sur grappes de PC avec tolérance aux pannes à faible coût, Université Henri Poincaré, defended on February, 2, 2011 (advisers: Stéphane Vialle and Virginie Galtier)

PhD: Cristian Rosa, Performance & Correctness Assessment of Distributed Systems, Université Henri Poincaré, defended on October, 24, 2011 (advisers: Stephan Merz and Martin Quinson).

PhD: Wilfried Kirschenmann Toward sustainable intensive computing kernels, Université Henri Poincaré, expected in 2012 (advisers: Stéphane Vialle and Laurent Plagne)

PhD: Soumeya Hernane, Models and Algorithms of coherent data sharing for high performance parallel and distributed computing, University of Oran, Algeria and University of Univ. Nancy 2, expected in 2012 (advisers: Jens Gustedt and Mohamed Benyettou)

PhD: Thomas Jost, Sparse direct linear solver, Université Henri Poincaré, expected in 2012 (advisers: Bruno Lévy and Sylvain Contassot-Vivier).

PhD: Marion Guthmuller, Study of Legacy Distributed Applications through Simulation and Model-Checking for the Discovery and Validation of Behavioral Properties, Université Nancy II, expected in 2014 (advisers: Sylvain Contassot-Vivier and Martin Quinson).
PhD: Tomasz Buchert, *Middleware for the orchestration of challenging large-scale experiments on distributed systems*, Université Nancy II, expected in 2014 (advisers: Jens Gustedt and Lucas Nussbaum).

master: Marion Guthmuller, *Vérification dynamique de propriétés de vivacité dans SimGrid*, ESIAL and Université Nancy I (adviser: Martin Quinson).


master: Yoanne Girardin, *Conducting experiments on a large-scale research testbed with a workflow management system*, ESIAL (advisor: Lucas Nussbaum).

engineering intern: Matías Ezequiel Vara *Ordered Read-Write Locks on Multicore Architectures* Universidad Nacional de La Plata (Argentina) (adviser Jens Gustedt)
9. Dissemination

9.1. Animation of the scientific community

9.1.1. Editorial Work


Adrian Kosowski is a guest editor for *Theoretical Computer Science* and *Computing and Informatics.*

Olivier Beaumont is Associate Editor for *IEEE Transactions on Parallel and Distributed Systems (IEEE TPDS).*

9.1.1.1. Conference Chair

- Olivier Beaumont was the Vice-Chair (Algoritm Track) of *IPDPS 2011*, the 25th IEEE International Parallel and Distributed Processing Symposium, May 16-20, 2011 Anchorage (Alaska) USA
- Nicolas Hanusse is the Conference Chair of *14th French Conference of Communications in Network (Algotel 2012)*
- Nicolas Hanusse is the Conference Chair of *International Conference on Algorithm (FUN 2012)*
- Ralf Klasing was the Conference Chair of the *Bordeaux Workshop on Identifying Codes (BWIC 2011)*, Bordeaux, France, 21/11-25/11/2011.
- Ralf Klasing is the Conference Chair of the *11th International Symposium on Experimental Algorithms (SEA 2012)*, Bordeaux, France, June 7-9, 2012.
- Adrian Kosowski was the Conference Organization & Proceedings Co-Chair of the *18th International Colloquium on Structural Information and Communication Complexity (SIROCCO 2011)*, Gdańsk, Poland, June 26-29, 2011.

9.1.1.2. Steering Committees

- Cyril Gavoille is a member of the Steering Committee of the *ACM Symposium on Principles of Distributed Computing (PODC).*
- Ralf Klasing is a member of the Steering Committee of the *International Colloquium on Structural Information and Communication Complexity (SIROCCO).*

9.1.1.3. Program Committees

- ESA 2011 (Sep. 5-9, Saarbrücken, Germany) Annual European Symposium on Algorithms (C. Gavoille)
- DISC 2012 (Oct. 16-18, Salvador, Brazil), International Symposium on Distributed Computing (C. Gavoille)
- ISAAC 2012 (Dec. 19-21, Taipei, Taiwan), International Symposium on Algorithms and Computation (C. Gavoille)
- ICDCN 2012 (Jan. 3-6, Hong-Kong), International Conference on Distributed Computing and Networking (C. Gavoille)
- SEA 2012, 11th International Symposium on Experimental Algorithms, Bordeaux, France, June 7-9, 2012 (R. Klasing, A. Kosowski)
• IWOCA 2012, 23rd International Workshop on Combinatorial Algorithms, July 19-21, 2012, Kalasalingam University, Anand Nagar, Krishnankoil, Tamil Nadu, India (R. Klasing)
• ICDCN 2012, 13th International Conference on Distributed Computing and Networking, January 3-6, 2012, Hong Kong, China (A. Kosowski)
• ICPP 2012, 41st International Conference on Parallel Processing, Pittsburgh, PA, USA, September 10-13, 2012 (O. Beaumont)
• IPDPS 2012, 26th IEEE International Parallel & Distributed Processing Symposium, May 21-25, 2012, Shanghai, China (O. Beaumont)
• HCW 2012, 20th International Heterogeneity in Computing Workshop, May 21-25, 2012, Shanghai, China (O. Beaumont)
• HIPC 2011, 18th annual IEEE International Conference on High Performance Computing (HiPC 2011), Bengaluru (Bangalore), India, December 18-21, 2011. (O. Beaumont)
• ISCS 2011, 26th International Symposium on Computer and Information Sciences, 26-28 September 2011, London, UK (O. Beaumont)
• EUROPAR 2011, local chair (P2P systems track), 17th International European Conference on Parallel and Distributed Computing Euro-Par 2011, Bordeaux, France, August 29-September 2, 2011 (O. Beaumont)
• IC3, The Fourth International Conference on Contemporary Computing (IC3-2011), NOIDA, (outskirts of New Delhi), India, August 8-10, 2011 (O. Beaumont)
• IPDPS 2011, Vice-Chair (Algorithms) 25th IEEE International Parallel & Distributed Processing Symposium, May 16-20, 2011 Anchorage (Alaska) USA (O. Beaumont)
• SIROCCO 2011, 18th International Colloquium on Structural Information and Communication Complexity, June 26-29, 2011, Gdansk, Poland (R. Klasing, A. Kosowski)
• FOMC 2011, 7th ACM SIGACT/SIGMOBILE International Workshop on Foundations of Mobile Computing (formerly known as DIALM-POMC), June 9, 2011, San Jose, California, USA (R. Klasing)
• ADHOC-NOW 2011, 10th International Conference on Ad Hoc Networks and Wireless, July 18-20, 2011, Paderborn, Germany (R. Klasing)
• IWOCA 2011, 22nd International Workshop on Combinatorial Algorithms, June 20-22, 2011, University of Victoria, Canada (R. Klasing)
• AlgoTel 2011, 13èmes Rencontres Francophones sur les Aspects Algorithmiques des Télécommunications (D. Ilcinkas)
• CSA 2011, 3rd FTRA International Conference on Computer Science and its Applications, December 12-15, 2011, Jeju, Korea (L. Eyraud-Dubois)

9.1.2. Organizing Committees
• Cyril Gavoille was the General Chair of PODC 2011, the 30th Annual ACM Symposium on Principles of Distributed Computing, June 6-8, San Jose, California.
• Ralf Klasing was the Conference Chair of the Bordeaux Workshop on Identifying Codes (BWIC 2011), Bordeaux, France, 21/11-25/11/2011.
• Ralf Klasing is the Conference Chair of the 11th International Symposium on Experimental Algorithms (SEA 2012), Bordeaux, France, June 7-9, 2012.
• Adrian Kosowski was the Conference Organization Chair of the 18th International Colloquium on Structural Information and Communication Complexity (SIROCCO 2011), Gdańsk, Poland, June 26-29, 2011.
• David Ilcinkas was member of the organization committee of the second TERANET workshop (Toward Evolutively Routing Algorithms for scale-free/internet-like NETworks), September 19, 2011.

9.1.3. Research Administration

• Olivier Beaumont is the "Délégué Scientifique" and the head of the Project Committee at INRIA Bordeaux Sud-Ouest.
• Ralf Klasing is the Head of the "Combinatorics and Algorithms" team of the LaBRI.
• Ralf Klasing is a member of the Conseil Scientifique of the LaBRI.
• Ralf Klasing is a member of the Commission Consultative of the LaBRI.
• Ralf Klasing is responsible for the International Relations of the LaBRI.
• Ralf Klasing is a member of the Evaluation Committee of the programme "ANR DEFIS 2009".

9.1.4. PhD Thesis Refereeing Activities

• Olivier Beaumont was external reviewer of The-Thung NGuyen (LAAS Toulouse), November 2011
• Olivier Beaumont was external reviewer of Mathieu Valero (LIP6, Paris), December 2011
• Nicolas Hanusse was reviewer of Thomas Aynaud (Université Paris 6), November 2011
• Nicolas Hanusse was reviewer of Mauricio Soto (Université Paris 7), December 2011
• Ralf Klasing was reviewer and opponent in the Ph.D. defense of Ville Junnila (University of Turku, Finland), June 2011.
• Cyril Gavoille was external reviewer of Mathieu Chapelle (Université d’Orléans, LIFO), December 2011.

9.1.5. Invited Talks

• Ralf Klasing was an Invited Speaker at the 2nd Nordic Workshop on System and Network Optimization for Wireless (SNOW 2011), Sälen, Sweden, 24 - 26 March 2011. (Title of the talk: Cost Minimization in Multi-Interface Networks.)
• Cyril Gavoille was an Invited Speaker at the First International Workshop on Dynamic Systems (DY-NAM), Toulouse, December 2011, joint with OPODIS. (Title: Dynamic algorithms via forbidden-set labeling).
• Cyril Gavoille was an Invited Speaker at the "10 ans du séminaire MaMux - Mathématiques, musique et relations avec d’autres disciplines", Paris, May 2011. (Title: Oracles pour les arbres et les graphes).

9.2. Teaching
Licence: The members of CEPAGE are heavily involved in teaching activities at undergraduate level (Licence 1, 2 and 3, Master 1 and 2, Engineering Schools ENSEIRB). The teaching is carried out by members of the University as part of their teaching duties, and for CNRS/INRIA (at master 2 level) as extra work. It represents more than 500 hours per year.

Master: Communication and Routing (last year of engineering school ENSEIRB, 2011) O. Beaumont, L. Eyraud, N. Hanusse, R. Klasing, A. Kosowski (16h)

Master: Communication Algorithms in Networks (2nd year MASTER "Algorithms and Formal Methods", University of Bordeaux, 2011) R. Klasing (24h)

Master: Structure of Web Search Engines, ENSEIRB, O. Beaumont (16h)

Doctorat: titre du cours, nombre d’heures en équivalent temps plein, université, pays

Master: Distributed Algorithms (2nd year MASTER Informatique, University of Bordeaux, 2011) Cyril Gavoille (32h)
GRAAL Project-Team

8. Dissemination

8.1. Scientific Missions

Scheduling in Aussois, IV The GRAAL project at École normale supérieure de Lyon organized a workshop in Aussois, France on May 30-June 1, 2011. The workshop focused on scheduling for large-scale systems and on scientific computing. This was the sixth edition of this workshop series, after Aussois in August 2004, San Diego in November 2005, Aussois in May 2008, Knoxville in May 2009 and Aussois in June 2010. The next workshop will be held in Pittsburgh in June 2012.

Anne Benoit was a member of the PhD defense committee of Alexandru Dobrila (Besançon, examinateur).

Frédéric Desprez was a member of the following PhD defense committees: Ketan Maheshwari (Nice University, examinateur), Pedro Velho (Grenoble, examinateur, président), Guilherme Koslovski (ENS Lyon, examinateur), Pierre Riteau (Rennes University, rapporteur), Diana Moise (ENS Cachan, rapporteur).

Frédéric Desprez was a member of the ANR committee SIMI 2 – Science informatique et applications (“Blanc” et “Jeunes chercheuses et jeunes chercheurs”), and “Appel Blanc international”.

Gilles Fedak was a member of the following PhD defense committee: Fei Teng (Ecole Centrale Paris, examinateur). Gilles Fedak was project evaluator International Open Call (Appel Blanc International).

He was an expert for the Netherlands Organisation for Scientific Research (NWO).

Loris Marchal was a member of the PhD defense committee of Sékou Diakité (Besançon, examinateur).

Christian Pérez was a member of the following PhD defense committees: Carlos Hermán Rojas (Grenoble University, rapporteur), Alexandra Carpen-Amarie (ENS Cachan, rapporteur, président), Marcela Rivera (Nice University, rapporteur), and Baptiste Poirriez (Rennes University, examinateur).

Frédéric Vivien was a member of the following PhD defense committees: Abir Benabid (Université Paris 6, rapporteur), Amina Guermouche (Université Paris Sud, examinateur).

Frédéric Vivien was a member of the AERES committee for the evaluation of the FEMTO-ST laboratory, Besançon, France.

8.2. Animation of the scientific community

8.2.1. Edition and Program Committees

Anne Benoit is a member of the Editorial Board (Associate Editor) of JPDC, the Journal of Parallel and Distributed Computing.

She was the General Chair of the 20th International Heterogeneity in Computing Workshop, HCW 2011, held in Anchorage, USA, May 2011 (in conjunction with IPDPS 2011). She is a member of the organizing committee of the SIAM Conf. on Parallel Processing for Scientific Computing (PP 2012), Savannah, USA, February 2012; Program vice chair of the 26th IEEE Int. Conf. on Advanced Information Networking and Applications (AINA 2012), for Track 5: "Distributed and Parallel Systems", Fukuoka, Japan, March 2012; Program vice co-chair of the IEEE Cluster 2012 Conference, in "Applications and Algorithms", Beijing, China, September 2012. She was a member of the program committees of SPAA 2011 (ACM Symposium on Parallelism in Algorithms and Architectures), IPDPS 2011 (IEEE International Parallel and Distributed Processing Symposium), and HiPC 2011 (IEEE International Conference on High Performance Computing). In 2012, she is a member of the program committees of HPDC, CCGrid and IPDPS.


Jean-Yves L’Excellent is a member of the program committee of Vecpar 2012.

Loris Marchal was in the program committee of IPDPS 2011 and ICPP 2011, and is in the program committee of IPDPS 2012 and ICPP 2012.

Christian Pérez was a member of the program committees of the 17th IEEE International Conference on Parallel and Distributed Systems (ICPADS 2011), December 7-9, Taichung, Taiwan, the IEEE Cluster 2011 Conference, September 26–30, Austin, TX, USA, the Euro-Par 2011, August 29th-September 2nd, Bordeaux, France, the Then Ninth International Conference on Service Oriented Computing (ICSOC 2011), December 5-8, Paphos, Cyprus, the ParCo Conference, August 30th-September 2th, Ghent, Belgium, the Second Workshop on MapReduce and its Application (MapReduce’2011), June 18-19, Delft, the Netherlands, the Second workshop on New Frontiers in High-performance and Hardware-aware Computing (HipHAC’11), February 13th, San Antonio, TX, USA, the Second Conference Facing the Multicore-Challenge II, September 28-30, Karlsruhe, Germany, and the Twentieth edition of the Rencontres francophones du Parallélisme (RenPar’20), May 10-13, Saint Malo, France He was co-organizer of the Grid’5000 Spring School, April 18-21, Reims, France.

Bora Uçar was a member of the program committee of Algorithms and Applications track of ICNC’11, the Second International Conference on Networking and Computing, Osaka, Japan, November 30–December 2, 2011; HPSS 2011, Algorithms and Programming Tools for Next Generation High-Performance Scientific Software, held as a workshop of Euro-Par 2011, Bordeaux, France, August
29–September 2, 2011; I IC3, The fourth international conference on Contemporary Computing, JIIT University, Noida, India, August 8–10, 2011; PCO’11, Parallel Computing and Optimization, a workshop of the IPDPS 2011 (25th IEEE International Parallel & Distributed Processing Symposium), May 16–20, 2011. Bora Uçar was also a member of the organizing committee of CSC11, The 5th SIAM Workshop on Combinatorial Scientific Computing, Darmstadt, Germany, May 19–21, 2011.

Yves Robert co-edited a special issue of Parallel Computing. This special issue is a follow-on of ISPDC’2009 and HeteroPar’2010 and gathers extended versions of the best contributions to these events.

Yves Robert will be program vice-chair for the Algorithms track of HiPC’2012, the IEEE International Conference on High-Performance Computing. He will be the program co-chair of ICPP’2013, the International Conference on Parallel Processing. This international conference will be held at ENS Lyon in September 2013.

Frédéric Vivien is an associate editor of Parallel Computing.

Frédéric Vivien was a member of the program committee of the 12e congrès annuel de la Société française de Recherche Opérationnelle et d’Aide à la Décision (ROADEF 2011), March 2-4 2011, Saint-Étienne, France; the PhD forum of the IEEE International Parallel & Distributed Processing Symposium (IPDPS 2011), May 16-20, 2011, Anchorage, USA; the 31st Int'l Conference on Distributed Computing Systems (ICDCS 2011), June 20-24, 2011 Minneapolis, USA; the annual IEEE International Conference on High Performance Computing (HiPC 2011), Bengaluru (Bangalore), India, Dec. 18 - 21, 2011; the 20th Euromicro International Conference on Parallel, Distributed and Network-Based Computing (PDP 2012), Munich, Germany, February 15-17, 2012; the 12th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2012), May 13-16, 2012, Ottawa, Canada; and he was was the local chair for the Theory topic of Euro-Par 2011, August 29-September 2, Bordeaux, France, 2011.

8.3. Teaching

Doctorat: Sparse Direct Linear Solvers, 4 hours, University of Aachen, Germany, by Jean-Yves L'Excellent.

Doctorat: A three-hours course on parallel sparse matrix vector multiplies, iterative solvers, and models and methods for efficient parallelization at University of Murcia, Spain, 28 and 29 November 2011, by Bora Uçar.

Licence: Réseaux, 12 hours, L3, UCBL, France.

Licence: Probabilités, 32 hours, L3, ENS Lyon, by Yves Robert

Master: Algorithmique Parallèle, 39 hours, M1, ENS Lyon, France, by Frédéric Vivien

Master: Administration Réseaux, 16 hours, M2, UCBL, Lyon, France.

Master: Certification CCNA, 15 hours, M2, UCBL, France.

Master: Certification CCNA, 15 hours, M2 apprentissage, UCBL, France.

Master: Client/Serveur, 6 hours, M2, UCBL, France.

Master: Grids and Clouds, 26 hours, M2, ENS Lyon, France, by Eddy Caron, Christian Pérez

Master: Introduction aux Systèmes et Réseaux, 55 hours, M2 double compétence en informatique, UCBL, France.

Master: Réseaux, 18 hours, M1, ÉNS-Lyon, France.

Master: RTS, 9 hours, M2 recherche, INSA, France.

Master: Scheduling, 36 hours, M2, ENS Lyon, France, by Loris Marchal and Frédéric Vivien

Master: Sécurité Administration Réseaux, 6 hours, M2, UCBL, France.
Master: Sécurité Administration Réseaux, 20 hours, M2 apprentissage, UCBL, France.
Master: Sécurité Administration Réseaux, 20 hours, M2 double compétence en informatique, UCBL, France.
Master: Algorithmique Combinatoire, 54 hours, M1, Université de Franche-Comté, by Jean-Marc Nicod
Master: Algorithmique Distribuée, 27 hours, M2, Université de Franche-Comté, by Jean-Marc Nicod
Master: Modélisation et Evaluation des Systèmes Informatiques, 15 hours, M2, Université de Franche-Comté, by Jean-Marc Nicod
Master: Algorithmique Concurrente, 35 hours, M2 (on-line learning), Université de Franche-Comté, by Jean-Marc Nicod
Master: Modélisation et Evaluation des Systèmes Informatiques, 35 hours, M2 (on-line learning), Université de Franche-Comté, by Jean-Marc Nicod

PhD & HdR:

PhD : Mathias Jacquelin, “Memory-aware algorithms: From multicore processors to large scale platforms”, ENS-Lyon, July 20, 2011, Loris Marchal and Yves Robert
PhD: Clément Rezvoy, “Large Scale Parallel Inference of Protein and Protein Domain Families”, ENS Lyon, September 28, 2011, Daniel Kahn and Frédéric Vivien
PhD in progress : Guillaume Aupy, “Scheduling for reliability”, October 1, 2011, Anne Benoit and Yves Robert
PhD in progress : Cristian Klein, “Multi-Level Cooperative Resource Management”, October 1, 2009, Cristian Pérez
PhD in progress: Vincent Pichon, “Programmation d’applications scientifiques de couplage de codes à base de composants logiciels”, April 6, 2009, André Ribes (EDF) and Christian Pérez
PhD in progress: Paul Renaud-Goud, “Energy-aware scheduling algorithms”, October 1, 2009, Anne Benoit and Yves Robert
PhD in progress : Mohamed Sid-Lakhdar, “Exploiting clusters of multicores for the solution of large-scale spare linear systems with multifrontal methods”, October 01, 2011, Frédéric Vivien and Jean-Yves L’Excellent
PhD in progress : Lamiel Toch, “Batch scheduling using virtualization”, October 01, 2009, Laurent Philippe and Jean-Marc Nicod
PhD in progress : Dounia Zaidouni “Resilient algorithms for exascale platforms”, October 01, 2011, Yves Robert and Frédéric Vivien
PhD in progress: Georges Markomanolis “Environnement de simulation pour l’aide au dimensionnement de grilles de calcul”, December 1, 2009, Frédéric Desprez and Frédéric Suter
PhD in progress: Adrian Muresan “Ordonnancement et déploiement d’applications de gestion de données à grande échelle sur des plates-formes de type Clouds”, September 1, 2009, Eddy Caron and Frédéric Desprez
PhD in progress: Sylvain Gault “Ordonnancement dans les plates-formes MapReduce”, December 1, 2010, Frédéric Desprez
PhD in progress: Anthony Simonet “Exécution efficace des applications parallèles de traitement intensif de données sur les infrastructures distribuées hybrides”, November 1, 2011, Gilles Fedak
8. Dissemination

8.1. Animation of the scientific community

- Cédric Bastoul, Program Committee Member of the 3rd PARMA Workshop on Parallel Programming and Run-time Management Techniques for Many-core Architectures (PARMA 2012).
- Cédric Bastoul, Program Committee Member of the 16th ACM International Conference on Computing Frontiers (CF’2011).
- Laura Grigori, Member of Organizing Committee of 5th SIAM Workshop on Combinatorial Scientific Computing (CSC).
- Laura Grigori, Member of Program Committee of IEEE International Parallel and Distributed Processing Symposium, IPDPS 2011.
HIEPACS Project-Team

9. Dissemination

9.1. Animation of the scientific community

Olivier Coulaud has been member of the scientific committee of the international conference Supercomputing 2011 and local chair of the topic “High Performance and Scientific Applications” at EuroPar 2011. He is member of the Inria COST GATI committe (in charge of incentive actions), of the C3I GENCI committe and of the scientific board of the regional computing mesocentre. Moreover, he is the leader of the Inria PlaFRIM computing plateform.

Luc Giraud has been co-chair of the Application area at Supercomputing 2011, member of the scientific committee of the international conferences PDSEC-11, PDCN-11 and local chair of the topic “Parallel numerical algorithms” at EuroPar 2011. He was member of the selection committee for the ANR MN programme. He was also involved in the EESI working group 4.3 entitled “Numerical Libraries, Solvers and Algorithms”. Luc Giraud was co-organizer of the EDF-CEA-Inria scientific school (Toward petaflop numerical simulation on parallel hybrid architectures) which took place at the beginning of june 2011.

Jean Roman was president of the Project Committee of Inria Bordeaux - Sud-Ouest and member of the National Evaluation Committee of Inria until june 2011. He has been member of the scientific committee of the international conference EuroMicro PDP’11 (IEEE) and of the national conference Renpar’11. He was one of the co-chairs of EuroPar 2011. Jean Roman was co-organizer of the EDF-CEA-Inria scientific school (Toward petaflop numerical simulation on parallel hybrid architectures) which took place at the begining of june 2011. He is member of the “Scientific Board” of the CEA-DAM. He is now in charge at the national level of the Inria scientific activities concerning High Performance Computing.

Finally, the HiePACS members have contributed to the reviewing process of several international journals (BIT, Concurrency and Computation: Practice and Experience (CCPE), Computers and Fluids, Geophysical Prospecting, IEEE Trans. on Parallel and Distributed Systems, International Journal for Numerical Methods in Fluids, Parallel Computing, SIAM J. Scient. Comp., SIAM J. Numer. Analysis), to the reviewing process of international conferences (Supercomputing 2011, EuroPar 2011, IPDPS 2011, ICPP 2011, ...), to the referee of PhD dissertations for various French universities (ENS-Lyon/computer science, Lyon 1/applied maths, Rennes/computer science, Pau/Comp. Chemistry, ...) and have acted as experts for the research agency ANR-MN.

9.2. Teaching

In the following are listed the lectures given by the HiePACS members.

Undergraduate level

1. A. Esnard: Operating system programming, 36h, University Bordeaux I; Using network, 23h, University Bordeaux I.

2. A. Esnard: in charge of the computer science certificate for Internet (C2i) at the University Bordeaux I.

Post graduate level

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

2. A. Esnard: Network management, 27h, University Bordeaux I; Programming distributed applications, 60h, ENSEIRB-MatMeca, Talence.
3. 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.

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

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

6. X. Vasseur: Solution of PDE, 16 h, ENSEEIHT Toulouse; Linear Algebra and Optimization, 25 h, ISEA-ENSICA, Toulouse; Introduction to MPI, 11 h, ENM, Toulouse; Introduction to Fortran 90, 5 h, CERFACS, Toulouse.

Doctorate level

1. E. Agullo: "Dense linear algebra on manycores", CEA-EDF-Inria School, June 6-10, 2 hours, 2011.


Defended PhD thesis


PhD in progress:


KERDATA Team

9. Dissemination

9.1. Animation of the scientific community

9.1.1. Leaderships, Steering Committees and community service

Euro-Par Conference Series. L. Bougé serves as a Vice-Chair of the Steering Committee of the Euro-Par annual conference series on parallel computing. G. Antoniu served as a Local Topic Chair for the Parallel and Distributed Data Management topic of Euro-Par 2011, held in Bordeaux.


IEEE HPCS 2012 Conference. G. Antoniu serves as a Special Session and Workshop Chair for the 2012 International Conference on High Performance Computing and Simulation to be held in Madrid, Spain, in July 2012.

ACM HPDC 2012 Conference. G. Antoniu serves as a Publicity Co-Chair for the 21st International ACM Symposium on High-Performance Parallel and Distributed Computing to be held in Delft, the Netherlands in June 2012.

ScienceCloud 2012 Workshop. G. Antoniu serves as a Co-Chair for the ScienceCloud international workshop to be held in conjunction with the ACM HPDC 2012 international conference.

MapReduce ANR Project. G. Antoniu serves as a coordinator for the MapReduce ANR project (see Section 8.2).

A-Brain Microsoft-INRIA Project. G. Antoniu and B. Thirion (PARIETAL Project-Team, INRIA Saclay – Île-de-France) co-lead the AzureBrain Microsoft-INRIA Project started in October 2010 in the framework of the Microsoft Research - INRIA Joint Center (2010-2013).

DataCloud@work Associate Team. G. Antoniu serves as a coordinator for the DataCloud@work Associate Team, a project involving the KerData and MYRIADS INRIA Teams in Rennes and the Distributed Systems Group from Politehnica University of Bucharest (2010–2012).

SCALUS Marie-Curie Initial Training Networks project. G. Antoniu coordinates the involvement of the INRIA RENNES – BRETAGNE ATLANTIQUE Research Center in the SCALUS Project of the Marie-Curie Initial Training Networks Programme (ITN), call FP7-PEOPLE-ITN-2008 (2009-2013).

CoreGRID ERCIM Working Group. G. Antoniu coordinates the involvement of the INRIA RENNES – BRETAGNE ATLANTIQUE Research Center in the CoreGRID ERCIM Working Group.

Agrégation of Mathematics. L. Bougé serves as a Vice-Chair of the National Selection Committee for High-School Mathematics Teachers, Informatics Track.

9.1.2. Editorial boards, direction of program committees

L. Bougé is a member of the Editorial Advisory Board of the Scientific Programming Journal.

9.1.3. Program Committees


L. Bougé served in the Program Committee for the following conferences: NPC 2011, IEEE Cluster 2011.
9.1.4. Evaluation committees, consulting

L. Bougé was the chair of the national evaluation committee for the 2011 Scientific Excellence Award (Prime d’excellence scientifique, PES) targeted to the researchers on an academic teaching position in France (around 420 applications.)

G. Antoniu is a member of INRIA’s Evaluation Committee.

G. Antoniu is a member of INRIA’s Committee for Science and Technology Orientation - International Relations Working Group (COST-GTRI).

9.2. Invited talks

9.2.1. Keynotes and special invited talks

G. Antoniu was invited to give a keynote talk entitled Scalable cloud storage for data-intensive applications: the BlobSeer approach at the MapReduce workshop held in San José (USA) in June 2011 in conjunction with the ACM HPDC 2011 international conference.

G. Antoniu was invited to give an invited talk at Microsoft TechDays 2011 (with Pierre-Louis Xech and Thierry Priol) and was interviewed (with Thierry Priol) for a live Web TV broadcast on MS TechDays TV (Palais des Congrès, Paris, February 2011).

9.2.2. Invited talks at international workshops


G. Antoniu gave an invited talk entitled Update on Damaris: How to Make CM1 Scale Linearly up to 10K Cores And What Comes Next at the 6th workshop of the Joint Laboratory for Petascale Computing held in November 2011 at NCSA/UIUC, Urbana-Champaign, IL, USA.


9.3. Administrative responsibilities

G. Antoniu serves as the Scientific Correspondent for the International Relations Office of the INRIA RENNES – BRETAGNE ATLANTIQUE Research Center.

G. Antoniu serves as the Scientific Leader of the KerData research team.

L. Bougé chairs the Computer Science and Telecommunication Department (Département Informatique et Télécommunications, DIT) of the Brittany Extension of ENS CACHAN. He leads the Master Program (Magistère) in Computer Science at the Brittany Extension of ENS CACHAN.

9.4. Miscellaneous

L. Bougé is a member of Scientific Committee of INRIA RENNES – BRETAGNE ATLANTIQUE (Comité des projets), standing for the ENS CACHAN partner.

G. Antoniu is a member of Scientific Committee of INRIA RENNES – BRETAGNE ATLANTIQUE (Comité des projets), standing for the KerData research team.

9.5. Teaching

9.5.1. Academic courses

Gabriel Antoniu:
Master (Engineering Degree, 5th year): Grid and cloud computing, 18 hours (lectures), M2 level, Ecole Supérieure d’Informatique, Electronique, Automatique, Paris, France.
Master: Grid, P2P and cloud data management, 18 hours (lectures), M2 level, University of Nantes, ALMA Master, Distributed Architectures module, France.
Master: Peer-to-Peer Applications and Systems, 10 hours (lectures), M2 level, ENS Cachan - Brittany, M2RI Master Program, PAP Module, France.
Doctorat: MapReduce processing, 2 hours (lectures), SCALUS Spring School on Distributed Data Management held in Barcelona, Spain, February 2011.

Luc Bougé:

Licence (Magistère): Introduction to programming, 36 hours, level L3, Magistère of Informatics and Telecommunication (MIT), ENS Cachan/Rennes, France
Licence (Magistère): Object-oriented programming in Java, 18 hours, level L3, Magistère of Informatics and Telecommunication (MIT), ENS Cachan/Rennes, France
Licence (Magistère): Introduction to research, 18 hours, L3, Magistère of Informatics and Telecommunication (MIT), ENS Cachan/Rennes, France
Master (Magistère): Object-oriented programming in C++, 36 hours, level M1, Magistère of Mathematics and Applications, ENS Cachan/Rennes, France

9.5.2. HDR and PhD theses supervision

PhD: Alexandra Carpen-Amarie, BlobSeer as a data-storage facility for Clouds: self-adaptation, integration, evaluation, ENS Cachan/Rennes, defended on December 15, 2011, supervisors: Luc Bougé (30 %) and Gabriel Antoniu (70 %). Repository: [ 7 ].
PhD: Diana Moise, Optimizing data management for MapReduce applications on large-scale distributed infrastructures, ENS Cachan/Rennes, defended on December 16, 2011, supervisors: Luc Bougé (30 %) and Gabriel Antoniu (70 %). Repository: [ 8 ].
PhD in progress: Viet-Trung Tran, Scalable array-oriented active storage, ENS Cachan/Rennes, started October 2009, supervisors: Luc Bougé (30 %) and Gabriel Antoniu (70 %).
PhD in progress: Houssem-Eddine Chihoub, Storage architecture and adaptive consistency for clouds, ENS Cachan/Rennes, started October 2010, supervisors: Gabriel Antoniu (70 %) and Mariá Pérez (Universidad Politecnica de Madrid, 30 %).
PhD in progress: Bunjamin Memishi, Fault-Tolerance in Scalable File Systems, Universidad Politecnica de Madrid, started October 2010, supervisors: Gabriel Antoniu (30 %) and Mariá Pérez (Universidad Politecnica de Madrid, 70 %).
PhD in progress: Radu Tudoran, AzureBrain: Perform genetic and neuroimaging data analysis in Azure clouds, ENS Cachan/Rennes, Started October 2011, supervisors: Luc Bougé (30 %) and Gabriel Antoniu (70 %).
PhD in progress: Matthieu Dorier, Scalable I/O and visualization for post-petascale HPC simulations, ENS Cachan/Rennes, started October 2011, supervisors: Luc Bougé (30 %) and Gabriel Antoniu (70 %).
# 9. Dissemination

## 9.1. Animation of the scientific community

- Brigitte Plateau is the director of Grenoble-INP ENSIMAG.
- Yves Denneulin has been appointed deputy director of the LIG.
- Corinne Touati is the Grenoble INP correspondent for international relations with Japan.
- Yves Denneulin and Jean-Marc Vincent are co-directors of the LICIA (Franco-Brazilian Laboratory).
- Jean-François Méhaut has been appointed as expert for the action HPC PME (Genci, Inria, Oseo) as well as for the ANR “COSINUS” program and the “Blanc” program.
- Jean-François Méhaut was a member of two selection committees in Joseph Fourier University and Grenoble INP.
- Arnaud Legrand was a member of the selection committee in University of Bordeaux 1 (LABRI).
- Bruno Gaujal was a member of the selection committee in ENS de Lyon.
- Jean-François Méhaut is a member of the HDR commission of Joseph Fourier University.

### 9.1.1. Invited Talks

- The 2011 International Conference on Mathematical Aspects of Game Theory and Applications (MAGTA 2011) (Panayotis Mertikopoulos)
- Network Games, Control and Optimization Conference, Paris (NetgCoop 2011) (Bruno Gaujal).
- Twenty years of LaBRI (Bordeaux). Jean-François Méhaut gave an invited talk entitled “twenty years of multithreading”.

### 9.1.2. Journal, Conference and Workshop Organization

- Chair and organizer of the JLPC (Joint Laboratory on Petascale Computing) workshop (J-F. Méhaut)
- Co-chair of the 1st International Workshop on Optimization for Green Wireless Communication Networks (GreenNet 2011) (C. Touati)
- Web chair of the International Conference on NETwork Games, COntrol and OPtimization (NetG-Coop 2011) (C. Touati)
- Co-general chair of PCGrid 2011 (D. Kondo).

### 9.1.3. Program Committees

- D. Kondo was a program committee member of CCGrid 2011, ServP2P 2011, and BADS 2011.
- 7th International ICQT Workshop on Advanced Internet Charging and QoS Technology (ICQT’11) (C. Touati)
- A. Legrand was program committee member of CCgrid 2011 and IPDPS 2011 and 2012.
9.1.4. Thesis Defense

- Pierre Coucheney *Optimisation des réseaux sans fil: une approche par la théorie des jeux* (August 31)
- Ahmed Harbaoui *Vers une modélisation et un dimensionnement automatique des applications réparties* (October 21)
- Carlos Prada Rojas *Une approche à base de composants logiciels pour l’observation de systèmes embarqués* (June 24)
- Kelly Rosa Braghetto *Modeling Techniques for Business Process Performance Analysis* (September 21)
- Pedro Velho *Accurate and Fast Simulations of Large-Scale Distributed Computing Systems* (July 4)
- Christiane Vilaca Pousa Ribeiro *Contributions on Memory Affinity Management for Hierarchical Shared Memory Multi-core Platforms* (June 29)
- Blaise Yenke *Ordonnancement des sauvegardes/reprises d’applications de calcul haute performance dans les environnements dynamiques* (January 7)

9.1.5. Thesis Committees

Researchers of the MESCAL project-team have served on the following "habilitation" thesis (HDR) committees

- Brigitte Plateau served on the HDR thesis committee of J.-M. Menaud (Ecole des Mines de Nantes) and Agnès Front (LIG).

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

- Brigitte Plateau served on the thesis committee of Eric Simon (LIG) and presided the jury of Ahmed Harbaoui (Orange Labs).
- Bruno Gaujal served on the thesis committee of Euriell Le Corronc (Angers) as a reviewer.
- Jean-François Méhaut presided the jury of the PhD defense of Benjamin Negrevergne (Grenoble). He was a member of the thesis committee of Cristian Rosa (Nancy) Cédric Augonnet (Bordeaux), Bogdan Cornea (Montbéliard), Khawar Sajjad (Versailles) and Paulin Melatagia (Yaoundé, Cameroon).
- Jean-Marc Vincent was a member of the thesis committee of Bogdan Cornea (Besançon) and Xavier Grehant (Paris).
- Yves Denneulin served on the thesis committee of Guilherme Piêgas Koslovski (Lyon), Nicolas Ferry (Nice) and Hiep-Thuan Do (Orléans) as a reviewer.
- Jean-Marc Vincent contributed to the national initiative for introducing computer science to high school professors in mathematics. This material was collected in a book [71].

9.1.6. Popular Science

- Several members of MESCAL were involved in “fête de la science” showing everyday practical use of game theory.
- MESCAL team actively promotes science to young and non-scientific audience. This year, Corinne Touati participated to the "stage Maths C2+" and the bi-annual "semaine de l’ingénieur" to promote the use of mathematics to junior high and high school students in Rhône-Alpes.
- Jean-Marc Vincent contributed to the national initiative for introducing computer science to high school professors in mathematics. This material was collected in a book [71].

9.2. Teaching

Several members of mescal are university professors and comply with their recurrent teaching duties. In addition, here are more details on new lectures that were initiated by MESCAL members in 2011.
• Performance evaluation. Two new lectures on system modeling and performance evaluation started in Ensimag in 2011 at M1 and M2 levels.
• Game Theory and Applications, 24 hours, M2R, ENS de Lyon, France.
• A teaching unit has been opened in the University of Yaoundé 1, on distributed systems.
• "Research School" (open to M1, M2 and PhD students) on Game Theory for Networks, ENS de Lyon, France.
MOAIS Project-Team

9. Dissemination

9.1. Animation of the scientific community

- 2011 2010 Chair / Symposium co-chair
  
- 2011 Program committee
  
  - EGPGV (Eurographics Symposium on Parallel Rendering and Visualization)
    
    * Program Committee member since 2007
  
  - Eurographics 2012 (short papers topic)
  
  
  - VRC 2011
  
  - WEHA 2011 (Workshop on Exploitation of Hardware Accelerators)
  
  - ICAT 2011 (21st International Conference on Artificial Reality and Teleexistence)
  
  - SEARIS 2011 (Fourth Workshop on Software Engineering and Architectures for Realtime Interactive Systems)
  
  - ISVC 2011 et 2012 (International Symposium on Visual Computing)
  
  - SVR 2011 (Symposium on Virtual and Augmented Reality), Brazil
  
  - PAPP 2011 (International Workshop on Applications of Declarative and Object-oriented Parallel Programming)
  
  - CLCAR 2011 (Conferencia Latinamericana de Computación de Alto Rendimiento)
  
  - RenPar 2011 (20ièmes Rencontres Francophones du Parallelisme), may 10-13, 2011, Saint Malo, France
  
  - HCW’2011 (20th IEEE Heterogeneous Computing Workshop) may 2011, Anchorage, Alaska, USA
  
  - LSAP 2011 (3rd Workshop on Large-Scale System and Application Performance) june 2010, San Jose, USA
  
  
  - ISPDC (10th Internat Symposium on Parallel and Distributed Computing) july 6-8, 2011, Cluj-Napoca, Romania
  
  - IC3 2011 (4th International Conference of Contemporary Computing) august 8-10, 2011, New Delhi, India
  
  - ParCo’2011, august 30 - sept. 2, 2011, Ghent, Belgium
  
  - ScalSol (scalable solutions for greenIT), august 31 - sept. 2, 2011, Pafos, Cyprus
  
  - WAOA 2011, september 8-9, Saarbruecken, Germany
  
  - PPAM 2011, september 10-14, 2011, Torun, Poland
  
  - LaSCoG (7th Workshop on Large Scale Computations on Grids) september 2011, Torun, Poland
New perspectives in scheduling theory, october 9-14, 2011, Hangzhou, China
23th SBAC-PAD, october 26-29, 2011, Esperito Santo, Brazil

2011 Other.
Steering Board member of EGPGV 2011 (Eurographics Symposium on Parallel Rendering and Visualization)
Local chair of EuroPar 2011 (Parallel and Distributed Programming), Bordeaux, France

9.2. Teaching

Master M1. Introduction à la visualisation scientifique et à la programmation parallèle des architectures hybrides. 12 h de cours. Université de Saint Jacques de Compostelle, Espagne.

Master M2R. Architectures parallèles et protocoles hautes performances. 8h de cours. Université d’Orléans, France.


Master M2. Modèles de calcul, Complexité, Approximation et Heuristiques.

Master M1. Ordonnancement dans les systèmes informatiques et manufacturiers.

Algorithmique avancée” ENSIMAG 2A-apprentissage.

Ensimag - Master M1. Algorithmique et Programmation Orientée Objet.

Ensimag - Master M1. Information et Codage Numérique.


Master M2R Mosig. Parallel Systems.
9. Dissemination

9.1. Animation of the scientific community

The Runtime project organized the Euro-Par 2011 conference in August in Bordeaux.

Emmanuel Jeannot and Raymond Namyst are chairs and organizers of the 17th International European Conference on Parallel and Distributed Computing (Euro-Par 2011)

Raymond Namyst is vice-chair of the Research and Training Department in Mathematics and Computer Science (UFR Math-Info) of the University of Bordeaux 1. He is also a member of the Scientific Committee of the University of Bordeaux 1

Raymond Namyst is the head of the LaBRI-CNRS “SATANAS” (Runtime systems and algorithms for high performance numerical applications) research team (about. 50 people) that includes the BACCHUS, HIEPACS and Runtime INRIA groups.

Raymond Namyst chairs the scientific committee of the ANR “Numerical Models” program for the 2011-2013 period.

Raymond Namyst serves as an expert for the following initiatives/institutions:

- EESI (European Exascale Software Initiative, since 2010);
- CEA/DAM (as a “scientific advisor” for the 2008-2010 period);
- CEA-EDF-INRIA School technical committee (since 2009);
- GENCI (http://www.genci.fr/?lang=en, since 2009);
- ORAP (http://www.irisa.fr/ORAP/, as the INRIA representative since 2010).

In 2011, Raymond Namyst was co-chair of topic “Architecture and Networks” for the SuperComputing (SC) conference.

Raymond Namyst has been reviewer for the PhD dissertation of Swann Perarneau (University of Grenoble) and Christiane Poussa (University of Grenoble). He served as a member of the jury for the PhD defense of Souad Koliai (University of Versailles Saint Quentin) and Fabrice Dupros (BRGM, Orleans).

Raymond Namyst was a program committee member of the following international conferences: SC11, EuroMPI 2011, CASS 2011, PMEA 2011, A4MMC 2011.

Brice Goglin is member of the following program committees: SuperComputing 2012, EuroMPI 2011 and 2012, ISPAN 2011. He was also a reviewer for PLDI 2011 and CCGrid 2011 conferences, the CASS 2011 workshop, and the JPDC journal.

Denis Barthou has served as topic chair for Euro-par 2011 conference, has been member of the external review committee of IEEE/ACM PLDI 2011, member of the program committee of SMART 2011.

Denis Barthou has been reviewer of the PhD dissertation of Guillaume Rizk (University of Rennes 1), Samir Ammenouche (University of Versailles Saint Quentin) and has been member of the qualifying exam for the PhD of Alexandre Duchateau (University of Illinois, Urbana Champaign).

Denis Barthou was involved in the reviewing process of one ANR project proposal for the call “Infrastructures matérielles et logicielles pour la société numérique”. He serves as expert in the Exascale Research Lab.

Guillaume Mercier is member of the CCGrid 2011 program committee and was involved in the reviewing process for the Computer and Fluids Journal.
Olivier AUMAGE was involved in the reviewing process of two ANR project proposals for the call “Infrastructures matérielles et logicielles pour la société numérique”. He was also involved in the reviewing process of JPDC and Parallel Computing journals.

Emmanuel JEANNOT is member of the steering committee and the direction committee of the ADT Aladdin-G5K and serves as head of the Bordeaux site since October 2009.

Emmanuel JEANNOT has been reviewer of the PhD dissertation of Alexandru Dobilla (Université de Franche-Comté) and Robbert Higgins (University College Dublin, Ireland).


Emmanuel JEANNOT is member of the steering committee of the IEEE cluster conference.

Emmanuel JEANNOT is associate editor of the International Journal of Parallel, Emergent and Distributed Systems.

Emmanuel JEANNOT is member of the program committee of IPDPS 2012, heteropar 2011, PPAM, Cluster 2011 and Renpar 20 conferences.

Samuel THIBAULT is member of the program committee of HPCVirt. He was also involved in the reviewing process of the JPDC, SPE, and CCPE journals.

9.2. Seminars and invited talks

Raymond NAMYST gave a keynote speech at the International Conference On Preconditioning Techniques For Scientific And Industrial Applications (Preconditioning 2011) about “Programming heterogeneous, accelerator-based multicore machines: current situation and main challenges”.

Raymond NAMYST gave a keynote speech at the 9th International Conference on Parallel Processing and Applied Mathematics (PPAM 2011) about “Programming heterogeneous, accelerator-based multicore machines: a runtime system’s perspective”.

Raymond NAMYST gave an invited talk at the 4th Workshop on UnConventional High Performance Computing (UCHPC 2011) about “programming heterogeneous systems”.

Raymond NAMYST gave a lecture about “hybrid programming” at the 2011 CEA-EDF-INRIA school (Sophia Antipolis) about “Petaflop numerical simulation over hybrid parallel machines.”

9.3. Teaching

Members of Runtime project gave thousands of hours of teaching at University of Bordeaux and ENSEIRB-MATMECA engineering schools, covering a wide range of topics from basic use of computers and C programming to advance topics such as operating systems, parallel programming and high-performance runtime systems.

PhD & HdR:

PhD : Stéphanie MOREAUD, Mouvement de données et placement des tâches pour les communications haute performance sur machines hiérarchiques, Univ. Bordeaux, 12/10/2011, Brice GOGLIN and Raymond NAMYST

PhD : Cédric AUGONNET, Scheduling Tasks over Multicore machines enhanced with Accelerators: a Runtime System’s Perspective, Univ. Bordeaux, 09/12/2011, Samuel THIBAULT and Raymond NAMYST

PhD in progress : Bertrand PUTIGNY, Modèles de performance pour l’ordonnancement sur architectures multicoeurs hétérogènes, 2010/11, Brice GOGLIN and Denis BARTHOU

PhD in progress : François TESSIER, Placement d’applications hybrides sur machine non-uniformes multicoeurs, 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 hardware accelerators. 2011/10, Emmanuel JEANNOT and Samuel THIBAULT

PhD in progress: Jérôme CLET-ORTEGA, Exploitation efficace des architectures parallèles de type grappes de NUMA à l’aide de modèles hybrides de programmation, 2007/10, Raymond NAMYST and Guillaume MERCIER

PhD in progress: Sylvain HENRY, Modèles de programmation et systèmes d’exécution pour architectures hétérogènes, 2009/10, Denis BARTHOU and Alexandre DENIS

PhD in progress: Andres CHARIF-RUBIAL, Performance analysis and tuning of memory accesses for multi-core codes, 2008/10, Denis BARTHOU and William JALBY (Université de Versailles Saint Quentin en Yvelines)

PhD in progress: Julien JAEGER, Iterative compilation for irregular applications, 2007/10, Denis BARTHOU

PhD in progress: Andra HUGO, Composability of parallel codes over heterogeneous platforms, 2013/10, Abdou GUERMOUCHE and Pierre-André WACRENIER and Raymond NAMYST

PhD in progress: Cyril BORDAGE, Parallélisation de la méthode multipôle sur architecture hybride, 2012/10, Raymond NAMYST and David GOUDET (CEA Le Barp)

PhD in progress: Corentin ROSSIGNON, Design of an object-oriented runtime system for oil reserve simulations on heterogeneous architectures, 2013/10, Olivier AUMAGE and Pascal HÉNON (TOTAL) and Raymond NAMYST and Samuel THIBAULT

9.4. Diffusion of the scientific culture

- 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 working group on Scientific Mediation.
- Brice GOGLIN published two papers explaining multiprocessor operating systems [47] and affinities in modern computers [48] in Interstices.
- Brice GOGLIN presented the team’s research work to one hundred high-school students at the “Fête de la Science”.
- Stéphanie MOREAUD and Brice GOGLIN presented research careers at the Aquitec student exhibition.
DIONYSOS Project-Team

9. Dissemination

9.1. Animation of the scientific community

9.1.1. International memberships

- 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.

9.1.2. Organization of conferences

- G. Rubino is a member of the Steering Committee of the international conference QEST (Quantitative Evaluation of SysTems).
- César Viho co-organized (together with Laurent Toutain from TELECOM Bretagne) an international school about “Communicating objects”. The school was an initiative of the Irisa “Networks, Telecom and Services” department, and was sponsored by MATISSE doctoral school.
- Bruno Tuffin will be the co-ordinator of the “Analysis” track at the Winter Simulation Conference (WSC’12), Berlin, Germany, December 9-12, 2012. It will be the first time this event will leave North America.
- Bruno Tuffin was the TPC cho-chair for NetGCoop 2011, Oct. 12-14, Paris.

9.1.3. Program committees

Bruno Sericola serves in the Program Committee of the following conferences:


Gerardo Rubino serves in the Program Committee of the following conferences:

- ETS, 1st European Teletraffic Seminar, Poznan, Poland, 14-16 February 2011
- LANC 2011, 6th Latin America Networking Conference, in cooperation with IFIP/ACM, Quito, Ecuador, 12–14 October, 2011
- CLEI 2012. XXXVIII Conferencia Latinoamericana de Informática (Latin-American Informatics Conference), Medellín, Colombia, October 1–5, 2012.

Bruno Tuffin served as TPC member for

- IEEE International Conference on Communications (IEEE ICC 2011), June 5-9 2011, Kyoto, Japan.
- 7th Euro-NGI conference on Next Generation Internet Networks (NGI 2011), June 27-29 2011, Kaiserslautern, Germany.
- 8th International Workshop on Economics of Grids, Clouds, Systems and Services (GECON’2011).
Adlen Ksentini served as TPC member for
- IEEE Global Communication Conference, GLOBECOM 2011 Wireless Network Symposium, December 2011, Houston, Texas, USA
- IEEE International Conference on Communication, ICC 2011 Wireless Network Symposium, June 2011, Kyoto, Japan
- IEEE International Conference on Selected Topics in Mobile and Wireless Networking, October 2011, Shanghai, China

9.1.4. Editorial activity
- Raymond Marie is Associate Editor for Performance Evaluation.
- Bruno Sericola is a member of the Editorial Advisory Board of the Open Operational Research Journal.
- Bruno Sericola is a member of the Editorial Advisory Board of the International Journal of Stochastic Analysis.
- Bruno Tuffin is associate Editor for INFORMS Journal on Computing.
- Bruno Tuffin is associate Editor for Mathematical Methods of Operations Research.
- Bruno Tuffin is associate Editor for ACM Transactions on Modeling and Computer Simulation.
- Bruno Tuffin is a Co-guest Editor of a special issue of Telecommunication Systems Journal on Socio-Economic Issues of Next Generation Networks, to appear in 2011.
- Adlen Ksentini is Associate Editor of Hindawi International Journal of Digital Multimedia Broadcasting

9.1.5. Managing research activities
- Gerardo Rubino is a member of the Research Commission of TELECOM Bretagne (advisory board for the research activities of the institution).
- Gerardo Rubino is an exterior member of the Specialist Commission of the University of Versailles Saint-Quentin-en-Yvelines, Section 27 (since 2001).
- 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 (and Bruno Tuffin his substitute). The cluster groups most companies and academic institutions working in networking and on image-based applications in Western France.
- Gerardo Rubino is the INRIA representative at the GIS SISCOM, an association composed of the four main academic institutions in Western France in the area of information and communication sciences: the European University of Brittany-UEB, the Institut TELECOM, the CNRS and INRIA, to promote the excellence of the ICT research in Brittany.
- 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.
- César VIHO is responsible of the “Network, Telecommunication and Services” department of Irisa composed of 4 research teams. He is member of the Conseil de laboratoire and of the Conseil d’Orientations scientifiques (COS) of Irisa. He is in charge of administrative issues management of PhD students of Irisa and Inria. In the context of international relations of Irisa, he is responsible of relations with Africa area universities and research centers.
• Adlen Ksentini is the coordinator of the Special Interest Group (SIG) of the Communication Software Technical Committee (IEEE Communication Society)

9.1.6. Other activities

• B. Tuffin, Pricing in telecommunication networks: from congestion control and incentives design to competition among providers. ETICS Workshop, Versailles, France, June 2011.


• R. Marie made in November several seminar presentations in Brazil (Federal University of Minas Gerais, Federal University of Rio de Janeiro, Federal University Fluminense).

• G. Rubino gave several talks to High School students about research activity on applied mathematics and computer science. Topics were the following: rare event analysis, probabilistic tools for deterministic problems and research problems associated with Internet technologies.

9.2. Teaching

Licence L3: Introduction to networks, 20 hours, Istit/University of Rennes 1, France

Master M1: Introduction to networks, 24 hours, Esir/University of Rennes 1, France

Master M1: Wireless networking, 46 hours, Esir/University of Rennes 1, France

Master M1: Networks and protocols, 24 hours, Istit/University of Rennes 1, France

Master M1: Computer networks, 24 hours, Esir/University of Rennes 1, France

Master M1: Algorithms and graphs, 48 hours, Esir/University of Rennes 1, France

Master M1: Performance and dependability evaluation of computer systems, 54 hours, Istit/University of Rennes 1, France

Master M2: Validation and tests, 6 hours, Istit/University of Rennes 1, France

Master M2: Quality of service and multimedia, 6 hours, Istit/University of Rennes 1, France

Master M2: Multimedia transmission, 18 hours, Istit/University of Rennes 1, France

Master M2: Performance evaluation, 26 hours, Istit/University of Rennes 1, France

Master M2: Network security, 14 hours, Istit/University of Rennes 1, France

Master M2: Dependability analysis, 12 hours, Supelec, Rennes, France

Master M2: Simulation, 5 hours, Telecom Bretagne, Rennes, 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

PhD: Ghareeb Majd, Quality-aware multipath video-streaming in overlay networks, Université de Rennes 1, 22 September 2011, Adlen Ksentini and César Viho

9.3. Standardization activities

Participants: Anthony Baire, César Viho.
The Dionysos team dedicates a significant effort towards standardization and certification in the telecommunications area. We participate in several working groups of the main telecommunication standardization institutes like the IETF (Internet Engineering Task Force), ETSI (European Telecommunication Standardization Institute), etc. We are also active in the main mailing-lists treating new generation networks and protocols. Several proposals of drafts and contributions to the definition of standards and RFCs (Request For Comments) have been published. Our contributions focus today mainly on IPv6 and related protocols such as 6LowPAN and RPL.

9.3.1. IPv6 Ready Logo Program

**Participants:** Anthony Baire, César Viho.

Dionysos team has also a major role in the world-wide certification process for IPv6 products launched by the IPv6 Forum, the “IPv6 Ready Logo Program”. For details, see [http://www.ipv6ready.org](http://www.ipv6ready.org). This project aims to provide the means needed to test existing IPv6 products to be deployed in the market. Dionysos leads the technical part of this Program by defining the certification process itself, specifying required tests, and developing some of the interoperability tests needed. This work is done together with the IPv6 Forum, the ETSI in Europe, the WIDE-project in Japan and the TTA (Telecommunications Technology Association) in Korea.

In 2010 we started a collaboration with the IPSO alliance in order to address the usage of IPv6 on smart objects based on the IEEE 802.15.4 link layer (eg. sensor networks). These network have special constraints (limited power, packet loss, ...) and new protocols are designed at IETF (6LowPAN, RPL) to allow using IPv6 with these constraints.
9. Dissemination

9.1. Animation of the scientific community

C. Jard has been in 2011 member of the Program Committee of the following international conferences: NOTERE and FMOODS/FORTE. He is also member of the editorial board of the Annales des Télécommunications and the steering committee of MSR series of conferences. C. Jard supervises a CNRS national transverse program on formal approaches for embedded systems (AFSEC). C. Jard is the director of the research of the Brittany extension of the ENS Cachan (director of the pluridisciplinary institute called the Hubert Curien Research College). He is member of the scientific council of the European University of Brittany and member of the executive board of the CominLabs (french excellence initiative in ICST). He is expert of the AERES, the national evaluation agency and expert for the French ministry of research, he has also served as an expert in several programs of the ANR. He was recently nominated to the National Council of Universities (CNU). In 2011, C. Jard was president of the PhD or Habilitation jurys of V. Gripon (Telecom Bretagne), L. Paulevé (Ecole Centrale Nantes), S. Brault (University of Rennes 2), P. Niebert (University of Marseille).

A. Benveniste is the Scientific Director of the CominLabs Excellence Center (Laboratoire d’Excellence, part of the program Investissements d’Avenir of the french government). He is member of the Strategic Advisory Council of the Institute for Systems Research, Univ. of Maryland, College Park, USA. He is president of the Scientific Committee of the Common Bell Labs INRIA Laboratory. He is member of the Scientific Council of France Telecom.1 Albert Benveniste has been elected to the French Academy of Technologies.

Eric Fabre is associate editor (AE) for the journal IEEE Trans. on Automatic Control. He participated to the Alcatel Lucent Open Days in Lannion, where he presented the results of the joint lab on the distributed optimal power allocation in photonic networks. Eric Fabre was reviewer of Jingxian Lu’s PhD thesis (Univ. of Bordeaux 1).

L. Hélouët is the co-organizer of a weekly Seminar (68NQRT) at IRISA-INRIA Rennes on theoretical aspects of computer science. In 2011, L. Hélouët was member of the jury of Gilles Benattar at IrccYn Nante, and of Mario S. Alvim at Ecole Polytechnique.

G. Aucher was an organizer of the workshop Gipsy which took place in Rennes from the 25th to the 27th of October 2011 (http://www.irisa.fr/prive/pinchina/GIPSy/gipsy11.html). In 2011, he served as a reviewer in the following international journals: Journal of Logic and Computation, Studia Logica, Mathematical Social Science, Journal of Applied Non-classical Logic, Logique et analyse. He was a program committee member of the international conferences IJCAI 2011 (International Joint Conference in Artificial Intelligence) and LORI 2011 (Logic, Rationality and Interaction) and served as external reviewer for the international conference TARK 2011 (Theoretical Aspects of Rationality and Knowledge). He was invited to give talks at the Beth Foundation Symposium at the 14th Congress of Logic, Methodology and Philosophy of Science in Nancy on the 20th of July 2011 and at the Institute of Philosophy of Language in Lisbon on the 8th of November 2011.

9.2. Teaching

C. Jard is a full-time professor at the ENS Cachan and teaches mainly at the Master level, in Computer Science and Telecom, and in Maths. He supervises the third year of the cursus (the research master’s degree). He is also in charge of the competitive examination for the entry of new students in computer science in the French ENS schools. He teaches the following courses: L. Hélouët teaches algorithms (graphs, sorting algorithms, classical problems) to maths students preparing the aggregation at ENS Cachan, antenne de Bretagne. He is also involved in the INS project, which aim is to give the basic knowledge in computer science to teachers from 1Only facts related to the activities of DistribCom team are mentioned. Other roles or duties concern the S4 team, to which A. Benveniste also belongs.
other disciplines at the baccalaureat level. In this context, he supervises a development project by 5 teachers from Rennes academy. He is the co-supervisor (with C. Jard) of Rouwaida Abdallah’s Thesis. Eric Fabre teaches Numerical optimization methods, and Distributed algorithms and systems in the Master of computer science (M2), University Rennes 1. He teaches also Information theory and coding at ENS Cachan, magister Math, Info., Telecom, 2nd year.

Guillaume Aucher teaches Algorithms for graphs (L3 MIAGE, 20h TD) and Imperative programming in Java (L1 Computer Science, 20hTD+20hTP), both at the Univ. of Rennes 1.

François Schwarzentruber is a lecturer at ENS Cachan - Britany extension. He teaches an introductory course about algorithms to first year students of ENS (L3) and a course about conception and verification of programs to second year students (M1). He is also involved in the preparation of the computer science option of the competitive examination ‘agregation de maths’.

PhD & HdR

PhD : Bartosz Grabiec, Supervision de systèmes répartis utilisant des dépliages avec contraintes de modèle temporisés, ENS Cachan, 4 Octobre 2011, C. Jard.

PhD in progress : Ajay Kattepur, QoS in Web services, september 2009, A. Benveniste, C. Jard.

PhD in progress : Rouwaida Adballah, Implémentation de scénarios, march 2010, L. Hélouët, C. Jard.

PhD in progress : Cyrille Jégourel, Statistical Model Checking, January 2011, Axel Legay.

PhD in progress : Valérie Murat, Tree automata, January 2011, Axel Legay.


PhD in progress : Aurore Junier, Network calculus applied to network stability analysis, sept. 2010, C. Jard, A. Bouillard.

PhD in progress : Bastien Maubert, Logical foundations of games with imperfect information, sept. 2010, S. Pinchinat, G. Aucher.
9. Dissemination

9.1. Animation of the scientific community

- Eric Fleury was a member of the Interdisciplinary Workshop on Information and Decision in Social Networks scientific committee, MIT.
- Eric Fleury was a member of the CFIP program committee.
- Eric Fleury was co chair of the Social networks, from structures to politics workshop.
- Eric Fleury was a member of the 20th International Conference on Computer Communications and Networks (ICCCN 2011) program committee.
- Eric Fleury was a topic chair for Euro-Par 2011
- Eric Fleury was an invited speaker at the research summer school "école Intelligence Ambiante " (Lille, France).
- Eric Fleury was an invited speaker at the "Journées thématiques Rescom Réseaux de Capteurs et leurs applications.
- Eric Fleury has participated in the event All connected, an investigation on new numerical usages, co production with CCSTI Grenoble – La Casemate / Universcience – Cité des sciences et de l’industrie. The exhibition is an action of the NANOYOU project (FP7/2007-2013)
- Guillaume Chelius was an invited speaker at the at the IN’Tech Seminar on smart objects (Grenoble, France).
- Guillaume Chelius was an invited speaker at the at the "modèles et algorithm" seminar at INRIA Paris-Rocquencourt (Paris, France).
- Guillaume Chelius was an invited speaker at the at the "Conf’Lunch "seminar at INRIA Rennes-Bretagne Atlantique (Rennes, France).
- Guillaume Chelius has participated with the HiKoB startup to the "Rencontres INRIA Industrie" on healthcare @ home (Paris, France)
- Guillaume Chelius has participated with the HiKoB startup to the "Grenoble Innovation Fair" 2011 (Grenoble, France)

9.1.1. Leadership within scientific community

- Christophe Crespelle was member of the Ph.D. jury of Assia Hamzaoui (LIP6, Université Paris 6, France).
- Christophe Crespelle was member of the Ph.D. jury of Xiaomin Wang (LIP6, Université Paris 6, France).
- Eric Fleury was member was member the HDR jury of Anthony Busson (Université Paris Sud, France).
- Eric Fleury was member was member the HDR jury of Nathalie Mitton (Université de Lille – INRIA Nord Europe, France).
- Eric Fleury was member was member the Ph.D. jury and reviewer of the Ph.D. of Lamia Benamara (LIP6, UPMC, France).
- Eric Fleury was member was member the Ph.D. jury and reviewer of the Ph.D. of Thomas Aynaud (LIP6, UPMC, France).
• Eric Fleury was member of the Ph.D. jury and reviewer of the Ph.D. of Dorian Mazauric (Université de Nice – INRIA Sophia Antipolis, France).
• Eric Fleury was member of the Ph.D. jury and reviewer of the Ph.D. of Oussama Allali (LIP6, UPMC, France).
• Eric Fleury was Vice President of the expert committee for the ANR INFRA call.
• Eric Fleury is a member of the national PES board for the computer science section.
• Eric Fleury is Co-chair of the Networking group ResCom of the CNRS GDR ASR. He is also a member of the scientific committee of the GDR ASR.
• Eric Fleury is in the steering committee of the IXXI – Rhône Alpes Complex Systems Institute.
• Eric Fleury has been an expert for the Fund for Scientific Research - FNRS.
• Guillaume Chelius is a member of the IXXI – Complex Systems Institute scientific board.

9.2. Teaching

9.2.1. Teaching by Christophe Crespelle

Licence : Algorithme et programmation procédurale, 48h, niveau L1, Université Claude Bernard Lyon 1, France
Master : Architecture de sécurité des réseaux, 37h, niveau M2, Université Claude Bernard Lyon 1, France
Master : Sécurité et sûreté de fonctionnement, 12h, niveau M2, Université Claude Bernard Lyon 1, France
Master : Recherche opérationnelle, 24h, niveau M1, Université Claude Bernard Lyon 1, France
Master : Réseaux du futur, 12h, niveau M2, Université Claude Bernard Lyon 1, France
Master : Grands graphes de terrain, 18h, niveau M2, ENS de Lyon, France

9.2.2. Teaching by Eric Fleury

Eric Fleury is a professor at ENS Lyon in the Computer Science Department since 2007. The ENS de Lyon is one of the four Ecoles normales supérieures in France.
Licence : "Introduction to Algorithm" and "Architecture, System and Networking".
Eric Fleury is in charge for the CS department of the option in modeling complex systems. Since September 2009, Eric Fleury is the Head of the Computer Science Department at ENS de Lyon.

9.2.3. Teaching by Guillaume Chelius

Master : Wireless Networks class in the Master 2 System and Networks, IFI (Hanoi, Vietnam)
Master : Algorithms for Networks and Communications in the Fundamental Computer Sciences
Master at Department of computer science of ENS Lyon (Lyon, France)

9.2.4. PhDs

PhD in progress : Andreea Chis, Methods and tools for the compilation and software optimization of wireless embedded systems dedicated to applications, October 2007 - January 2012, E. Fleury and A. Fraboulet
PhD in progress : Qinna Wang, Uncovering overlapping dynamic communities, October 2008 - march 2012, E. Fleury
PhD in progress : Adrien Friggeri, Exploring Socially Cohesive Communities, September 2009 - October 2012, E. Fleury and G. Chelius
PhD in progress : Lucie Martinet, iBird: Individual Based Investigation of Resistance Dissemination, September 2011, E. Fleury and C. Crespelle
GANG Project-Team (section vide)
HIPERCOM Project-Team

9. Dissemination

9.1. Animation of the scientific community

9.1.1. Editorial boards, steering and program committees

Philippe Jacquet belongs to the editorial board of the DMTCS journal.

Pascale Minet was member of the Gilles Kahn 2011 jury awarding an excellent 2010 PhD thesis in Computer Science.

Pascale Minet was reviewer of the PhD Thesis of:


She was Jury member for the Habilitation à Diriger des Recherches of:

- Anthony Busson *Protocoles et évaluation de performances dans les réseaux ad hoc*, University of Paris Sud 11, December 2011.

Pascale Minet took an active part in the dissemination of the results obtained in the OCARI project, dealing with energy efficient industrial wireless sensor networks.

Pascale Minet was member of the program committee of:

- ICN 2011, the 10th International Conference on Networks, January 2011.
- IUCC 2011, the 10th IEEE International Conference on Ubiquitous Computing and Communications, August 2011.
- IWCMC 2011, the 7th International Wireless Communications and Mobile Computing Conference, July 2011.
- RTNS 2011, 18th International Conference on Real-Time and Network Systems, September 2011.
Pascale Minet was also reviewer for the following journals:

- IEEE Transactions on Vehicular Technology,
- IEEE Transactions on Wireless Communications,
- Real-Time Systems,
- International Journal of Communication Systems,
- Computer Communications Journal.

Paul Mühlethaler was reviewer for the following journals and international conferences:

- IEEE ITS Magazine,
- IEEE/ACM Transactions on Networking,
- ISCIS,
- ISIT,
- VTC spring.

Since July 2010, Paul Mühlethaler is scientific head of the DGA/INRIA partnership.

Cédric Adjih was a co-chair for ACM MOBIHOC 2011. He was also:

- Member of the program committee of AINTEC 2011, 7th Asian Internet Engineering Conference, November 2011.
- Reviewer for the journal ACM Transactions on Sensor Networks
- Reviewer for the MILCOM 2011, IEEE Military Communications Conference, November 2011.

Cédric Adjih served also as reviewer for the French ANR (for proposals for the Young Researchers program)

Emmanuel Baccelli was a co-chair for ACM MOBIHOC 2011, and is currently TPC for IEEE SECON, IEEE PerGroup, ACM MobileHealth and NovaEnv.

Aline C. Viana served as:

Local arrangement co-chair of ExtremeCom 2011: 3rd Extreme Conference on Communication, Manaus, Brazil. September 2011.

Publicity chair of ExtremeCom 2011: 3rd Extreme Conference on Communication, Manaus, Brazil. September 2011.

TPC co-chair of Shadow ACM Conext 2011: Shadow ACM 7th International Conference on emerging Networking EXperiments and Technologies. Shadow TPC meeting was in Toronto, Canada. August 2011.


She also served in the program committees for the following conferences/workshops:


9.1.2. Evaluation committees, consulting

A. Carneiro Viana served as a reviewer for the PhD committee of Natascia Piroso, Sapienza University of Rome, Italy. She has been also performing remote evaluation of short proposals for the EC "Future and Emerging Technologies" programme (EC FET-Open).

Emmanuel Baccelli served as expert reviewer for the french National Research Agency (ANR) in 2011.

9.2. Academic teaching

Philippe Jacquet taught:
- class: Mobile networking (Polytechnique),
- class: Telecommunication. Master COMASIC (Polytechnique)

Emmanuel Baccelli taught:
- class: Mobile networking at Ecole Polytechnique.

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.

Aline C. Viana was invited as a speaker at the GBR 2011, Beyond Networking workshop, Buzios, Rio de Janeiro, Brazil. October 2011.

9.3. Standardization

The HIPERCOM project-team has been very active in the standardization process at IETF. It made many contributions in the MANET, AUTOCONF and ROLL working groups (see for instance the publication list with the numerous IETF drafts).
9. Dissemination

9.1. Animation of the scientific community

Olivier Festor is the Co-Chair together with Aiko Pras from University of Twente 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. He is also co-chair of the IRTF Network Management Research Group.

In march 2011, Olivier Festor has been appointed as the Co-chair together with Lisandro Zambenedetti Grandville from the Federal University of Rio Grande do Sul (UFRGS) of the Internet Research Task Force (IRTF) Network Management Research Group.

Olivier Festor chaired sessions at the following conferences: IEEE ICC CSMA symposium.

Olivier Festor served as a TPC Member of the following 2011 events: 3rd ACM Workshop on Assurable and Usable Security Configuration (SafeConfig); Security track of the 4th IFIP International Conference on New Technologies, Mobility and Security (NTMS 2011); Colloque Francophone sur l’IngÉnierie des protocoles (CFIP 2011); IEEE POLICY 2011 (International Conference), ISPS 2011; International Workshop on Networks and Services Security (NSS’2011); IEEE International Conference on Communications ICC 2011 (TPC member of CISS and CSMA tracks); IEEE ICDM 2011 Workshop on Data Mining in Networks (DAMNET).

Olivier Festor has been appointed General Chair for IFIP AIMS’2011 and TPC Co-Chair for IEEE/IFIP International Conference on Network and Service Management (CNSM’2011). He was also Tutorial co-chair for the 15th IFIP/IEEE International Conference on Integrated Management (IM’2011).

Olivier Festor is member of the board of editors of the Springer Journal of Network and Systems Management. He is member of the editorial board of the IEEE Transactions on Network and Service Management.

Olivier Festor served as an expert for the CIFRE Ph.D. programme at the ANRT. He also served as an expert for the european commission in the area of network and service management. In 2011, Olivier Festor served as an expert for the review of the french national research council. He also served on the 2011 committee for academic scientific excellence bonus allocation (+400 applications have been processed by this committee in 2011).

Isabelle Chrisment was TPC Co-chair of CFIP’2011 and of IFIP AIMS’2011. She was member of the TPC of 2th joint TC6 and TC11 International IFIP Conference on Communications and Multimedia Security (CMS’2011) and of NOTERE 2011. She was also member of the steering committee of SARSSI 2011.

Isabelle Chrisment served as an expert to evaluate projects for ANR and also for DIM Logiciel et systèmes complexes(LSC) from Île-de-France area.

9.2. Teaching

There is a high demand on networking courses in the various universities in which LORIA is par. 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, ESIAL and École des Mines de Nancy engineering schools. In this section, we only enumerate the courses that are directly related to our research activity.

Within the Master degree, SSR (Services, Security and Networks) specialization, Isabelle Chrisment is in charge of the course entitled Advanced Networking. This course is one of the five foundation courses given to the students that follow a research and professional cursus in Networking in Nancy.
André Schaff is the Director of the ESIAL Engineering School. Isabelle Chrisment is co-directing the school and is in charge of the students recruitment process. Remi Badonnel is heading the Telecommunications and Networks specialization of the 2nd and 3rd years at the ESIAL engineering school. They teach the networking related courses in this cursus.

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. He is also co-responsible for the IPISO Master (Ecole des Mines de Paris - Nancy - Saint Etienne) and specifically the Software Architecture class. Notably, he is co-responsible for the "Businesses: the digital challenge Entreprises : le défi numérique, a class within the ARTEM alliance (ICN - Business School, Ecole des Mines de Nancy, Ecole d’Art / School of Art).

In 2011, Olivier Festor and Abdelkader Lahmadi did setup a new course at the ENSEM engineering school on distributed systems and distributed algorithms.

9.3. Tutorials, invited talks, panels, presentations

In addition to the presentation of all papers published in conferences in 2011, the team members made the following public talks:

- Olivier Festor did participate to the Dagstuhl Seminar 11042 entitled: *Learning from the Past: Implications for the Future Internet and its Management*? This seminar took place from January 27-30, 2011 in Schloss Dagstuhl, Germany.
- Alexandre Boeglin gave a presentation entitled at IETF 81 in Quebec City, Canada in the IRTF-NMRG session in july 2011.

9.4. Commissions

Team members participated to the following Ph.D. defense committees:

- Amélie Medem, Ph.D. in Computer Science from Université Pierre et Marie Curie - Sorbonne Universités. Title: *Conception de mécanismes d’amélioration de la gestion d’incidents dans les réseaux IP*, February 2011. (Olivier Festor)
- Patrick Battistello, Ph.D. in Computer Science from Telecom Bretagne. Title: *Protocole d’établissement d’appels sécurisés limitant les risques de (D)DOS et de SPIT à l’interconnexion entre opérateurs*, April 2011. (Olivier Festor)
- Sinan Hatahet, Ph.D. in Computer Science from University of Technology of Compiègne. Title: *Security in Unstructured P2P Systems*, April 2011. (Isabelle Chrisment)
- Gérard Wagener, joint Ph.D. in Computer Science from University of Luxembourg and INPL. Title *Self-Adaptive Honeypots Coercing and Assessing Attacker Behaviour*, June 2011. (Olivier Festor)
- Thibault Cholez, Ph.D. in Computer Science from University Henri Poincaré, Nancy 1. Title *Supervision des réseaux P2P structurés appliquée à la sécurité des contenus*, June 2011. (Isabelle Chrisment et Olivier Festor)
- Guilherme Koslovski, Ph.D. in Computer Science from ENS Lyon. Title: *Dynamically provisioned Virtual Infrastructures: specification, allocation and execution*, June 2011. (Olivier Festor)
- Tigran Avanesov, Ph.D. in Computer Science from University Henri Poincaré, Nancy 1. Title *Résolution de contraintes de déductibilité. Application à la composition de services Web sécurisés*, September 2011. (Isabelle Chrisment)
- Houssein Wehbe, Ph.D. in Computer Science from University of Rennes 1. Title *Transmission de flux vidéo en direct sur les réseaux pair à pair : optimisation de l’overlay et de la retransmission*, September 2011. (Isabelle Chrisment)
• Tony Bourdier, Ph.D. in Computer Science from University Henri Poincaré, Nancy 1. Title *Méthodes algébriques pour la formalisation et l’analyse de politiques de sécurité*, October 2011. (Isabelle Chrisment)

• Jörn Franke, Ph.D. in Computer Science from University Henri Poincaré, Nancy 1. Title *Coordination of Distributed Activities in Dynamic Situations. The Case of Inter-organizational Crisis Management*, October 2011. (Isabelle Chrisment)

• Cristian Rosa, Ph.D. in Computer Science from University Henri Poincaré, Nancy 1. Title *Performance and Correctness Assessment of Distributed Systems*, October 2011. (Isabelle Chrisment)

• Abdelhamid Salah Brahim, Ph.D. in Computer Science from Université Pierre et Marie Curie - Sorbonne Universités. Title *Information diffusion and community structure in a blog network*, December 2011. (Isabelle Chrisment)

• Johan Mazel, Ph.D. in Computer Science from INSA Toulouse. Title: *Unsupervised Network Anomaly Detection*, December 2011. (Olivier Festor)

Team members participated in the following academic recruitment committees:

• Isabelle Chrisment did lead a Professor position in mathematics recruitment committee in Nancy University.

• Olivier Festor was member of a Professor position recruitment committee in computer science at the Joseph Fourier University in Grenoble.

• Laurent Ciarletta was member of an Associate Professor position recruitment committee in computer science in Nancy University.
MAESTRO Project-Team

8. Dissemination

8.1. Animation of the scientific community

8.1.1. Editorial activities

E. Altman is an Associate Editor of *Journal of Economics, Dynamics and Control* (JEDC), *Dynamic Games and Applications* (DGAA) Springer, and *Computer Communications* (COMCOM) Elsevier.

K. Avrachenkov is an Associate Editor of *Performance Evaluation*.

A. Jean-Marie has been Associate Editor for *RAIRO Operations Research* until 2011.

P. Nain is the Editor-in-Chief of *Performance Evaluation* and an Associate Editor of *Operations Research Letters*.

8.1.2. Participation in technical program committees

S. Alouf was a program committee member of the following conferences:

- 29th International Symposium on Computer Performance, Modeling, Measurements and Evaluation (IFIP Performance 2011), Amsterdam, The Netherlands (October 18–20, 2011),
- IEEE 75th Vehicular Technology Conference (VTC2012-Spring), Yokohama, Japan (May 6–9, 2012).

E. Altman was a program committee member of the following conferences:

- 2nd International Conference on Game Theory for Networks (GameNets 2011), Shanghai, China (April 16–18, 2011),
- 5th International Conference on Game Theory and Management (GTM 2011), St. Petersburg, Russia (June 27–29, 2011),

K. Avrachenkov was a program committee member of the following conferences:

- 3rd International Conference on Advances in Future Internet (AFIN 2011), Nice/Saint Laurent du Var, France (August 21–27, 2011),
- 4th International Workshop on Multiple Access Communications (MACOM 2011), Trento, Italy (September 11–13, 2011),
- International Conference on NETwork Games, COntrOl and OPtimization (NETGCOOP 2011), Paris, France (October 12–14, 2011),
- 2nd Conference on Decision and Game Theory for Security (GameSec 2011), College Park, Maryland, USA (November 14–15, 2011).

M. Haddad was a program committee member of the following conferences:
– International Conference on NETwork Games, COntrol and OPtimization (NETGCOOP 2011), Paris, France (October 12–14, 2011),
– 2nd Conference on Decision and Game Theory for Security (GameSec 2011), College Park, Maryland, USA (November 14–15, 2011).

A. Jean-Marie was a program committee member of the following conferences:
– 13th Workshop on Mathematical Performance Modeling and Analysis (MAMA 2011), San Jose, California, USA (June 8, 2011),

P. Nain was a program committee member of the following conferences:
– 13th Workshop on Mathematical Performance Modeling and Analysis (MAMA 2011), San Jose, California, USA (June 8, 2011),

G. Neglia was a program committee member of the following conferences:
– 46th IEEE International Conference on Communications – Next Generation Networking and Internet Symposium (IEEE ICC 2011 – NGNI), Tokyo, Japan (June 6–8, 2011),
– 5th International IEEE WoWMoM Workshop on Autonomic and Opportunistic Communications (IEEE AOC 2011), Lucca Italy (June 20, 2011),
– 20th International Conference on Computer Communications and Networks (ICCCN 2011), Maui, Hawaii, USA (July 31 – August 4, 2011),
– 6th International Conference on Broadband, Wireless Computing, Communication and Applications (BWCCA 2011), Barcelona, Spain (October 26–28, 2011),

M. Panda was a program committee member of the following conferences:
– International Conference on NETwork Games, COntrol and OPtimization (NETGCOOP 2011), Paris, France (October 12–14, 2011),
– 2nd Conference on Decision and Game Theory for Security (GameSec 2011), College Park, Maryland, USA (November 14–15, 2011).

8.1.3. Conferences, meetings and tutorial organization

E. Altman was a TPC co-chair of the 2nd Conference on Decision and Game Theory for Security (GameSec 2011), College Park, Maryland, USA (November 14–15, 2011), and a co-chair of the 3rd International Workshop on Indoor and Outdoor Femto Cells (IOFC 2011), Princeton, New Jersey, USA (May 13, 2011). He has been the steering committee chair of the 9th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt 2011), Princeton, New Jersey, USA (May 9–13, 2011) and the International Conference on NETwork Games, COntrol and OPtimization (NETGCOOP 2011), Paris, France (October 12–14, 2011).

K. Avrachenkov was chair and organizer of a special session on “Structured Markov Chains” at the 5th ICST International Conference on Performance Evaluation Methodologies and Tools (ValueTools 2011), Cachan, France (May 16–20, 2011).

8.1.4. Participation in thesis committees
E. Altman participated in the Habilitation (HDR) thesis committee of Rachid El-Azouzi (December 13, 2011, University of Avignon), and the PhD thesis committees of
– Van Minh Nguyen (June 20, 2011, Telecom ParisTech),
– Semir Medina Perlaza (July 8, 2011, SUPELEC) as a reviewer,
– Gaurav S. Kasbekar (September 29, 2011, University of Pennsylvania, Philadelphia) as a reviewer,
– Sreenath Ramanath (October 6, 2011, University of Avignon) as co-advisor,
– Anis Jdidi (November 3, 2011, University Pierre and Marie Curie).


A. Jean-Marie participated in the PhD thesis committees of
– Jean Daligault (July 5, 2011, University of Montpellier 2) as president,
– Dorian Mazauric (November 7, 2011, University of Nice-Sophia Antipolis) as president, and
– Dalila Goudia (December 6, 2011, University of Montpellier 2) as president.

P. Nain participated in the PhD thesis committees of
– Mohamad Jaber (October 6, 2011, University of Nice-Sophia Antipolis) as co-advisor.
– Tuan Minh Pham (December 14, 2011, University Pierre and Marie Curie) as a reviewer.
– Dorian Mazauric (November 7, 2011, University of Nice-Sophia Antipolis) as co-advisor.

8.1.5. Research administration

S. Alouf is a member of the Doctoral Committee of INRIA Sophia Antipolis - Méditerranée.

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.”

K. Avrachenkov
– is a member of the Invited Researchers Committee of INRIA Sophia Antipolis - Méditerranée.
– is responsible for validation of activity reports of all teams at INRIA Sophia Antipolis - Méditerranée.

N. Choungmo Fofack is the PhD representative at the General Information Commission of INRIA Sophia Antipolis - Méditerranée.

A. Jean-Marie
– is the scientific coordinator of INRIA activities in Montpellier.
– is member of the managing sub-committee of the Project-Team Committee of the INRIA Sophia Antipolis - Méditerranée research center.
– was appointed expert for the Recruiting Committee for Professors (Commission d’Évaluation des Appellations) at Telecom ParisTech.
– is a member of the Steering Committee of the GDR RO, a national research initiative on Operations Research sponsored by the CNRS.

P. Nain
– is Head of project-team MAESTRO.
is a member of the INRIA steering group (13 people including 6 researchers) in charge of producing the first version of the INRIA 2013-2017 strategic plan.

8.1.6. Miscellaneous (nominations, awards, etc.)

- E. Altman is a fellow member of IEEE.
- E. Altman, A. Jean-Marie and P. Nain are (elected) members of IFIP WG7.3 on “Computer System Modeling”.
- P. Nain is the Vice-Chair of the IFIP WG7.3 working group on “Computer System Modeling” and a Member of the Board of Directors of SIGMETRICS (elected for the period June 30, 2007 – July 1, 2011). This year he has been promoted at the rank of “directeur de recherche de classe exceptionnelle” (DRCE).

8.1.7. Scientific popularization

S. Alouf gave conferences at the Albert Camus Library, Antibes, France (May 20, 2011), at the International High School of Manosque, France (November 7, 2011) and at the Jean Cocteau High School of Miramas, France (November 24, 2011).

8.2. Teaching and supervision

8.2.1. Teaching activities

E. Altman
Master : “Network Engineering Games”, 15H (22.5H ETD), M2, University Pierre and Marie Curie (UPMC), France.

K. Avrachenkov
Master : “Linear Algebra and Numerical Methods”, 12H (18H ETD), M1 EuroAquae, University of Nice Sophia Antipolis (UNS), France.

N. Choungmo Fofack
Licence : “Stochastic processes for Signal Processing”, 64H (64H ETD), 1st year Electronic Engineering degree (L3), University of Nice Sophia Antipolis (UNS), France.

A. Jean-Marie
Master : Metrology and Quality of Service for Networks, 12H (18H ETD), M2, University of Montpellier 2, France.
Doctoral module : Advanced Markov Modeling, 18H (18H ETD), University of Montpellier 2, France.

D. Mazauric
Licence : “Functional Programming (Scheme)”, 18H (18H ETD), Computer Science Program (L1), University of Nice Sophia Antipolis (UNS), France.

P. Nain
Master : “Performance Evaluation of Networks”, 21H (32.5H ETD), M2 IFI Ubinet, University of Nice Sophia Antipolis (UNS), France.
8.2.2. HDR and PhD theses

PhD: Dorian Mazauric, “Discrete optimization in telecommunication networks: reconfiguration of the routing, energy efficient routing, link scheduling, and data placement” [12], University of Nice Sophia Antipolis, November 7 2011, advisors: Jean-Claude Bermond (INRIA project-team ASCOTTE) and Philippe Nain.

PhD: Sreenath Ramanath, “Cell design and resource allocation for small cell networks” [13], University of Avignon, October 6 2011, advisors: Eitan Altman and Merouane Debbah (SUPELEC).


PhD in progress: Richard Combes, “Self-organizing functionalities in radio networks,” October 1 2009, advisors: Eitan Altman and Zwi Altman (France Telecom) and Sylvain Sorin (University Pierre and Marie Curie).


PhD in progress: Julien Gaillard, “Creation, simulation and multidiscipline evaluation of dynamic mobility models in complex systems,” October 1 2011, advisors: Eitan Altman, Marc El-Bèze (University of Avignon) and Emmanuel Ethis (University of Avignon).


PhD in progress: Marina Sokol, “Clustering and learning techniques for traffic/user classification,” October 1 2009, advisors: Paulo Gonçalves (INRIA project-team RESO) and Philippe Nain.

8.3. Participation in scientific events

8.3.1. Conferences and workshops


E. Altman gave presentations at:

- 10th International Conference on Networking (Networking 2011), Valencia, Spain (May 9–13, 2011),
– Bionetic workshop, York, United Kingdom, (December 5–6, 2011).

K. Avrachenkov gave presentations at:
– 8th Workshop on Algorithms and Models for the Web Graph (WAW 2011), Atlanta, GA, USA (May 28, 2011),


M. K. Hanawal gave a presentation at:
– 2nd International Conference on Game Theory for Networks (GameNets 2011), Shanghai, China (April 16–18, 2011),

D. Mazauric gave a presentation at the 13th French Meeting on the Algorithmics of Telecommunications (AlgoTel’11), Agay, France (May 23–26, 2011).


M. Panda gave a presentation at the International Conference on NETwork Games, COntrOl and OPtimization (NETGCOOP 2011), Paris, France (October 12–14, 2011).

S. Ramanath gave presentations at:
– IEEE Winter School of Information Theory (WSIT), Barcelona, Spain (March 15–19, 2011).

8.3.2. Invited talks

K. Avrachenkov gave invited talks at the STAR-seminar on Stochastic Networks at CWI, The Netherlands (May 24, 2011) and at the TW Colloquium at University of Twente, The Netherlands (May 26, 2011).

M. K. Hanawal gave an invited talk at the Workshop on Stochastic Geometry (GDR ISIS), Paris, France (December 9, 2011).

G. Neglia gave an invited talk at the Workshop on Algorithmic Game Theory: Dynamics and Convergence in Distributed Systems (AlgoGT), Grenoble, France (June 20, 2011).

8.3.3. Schools and students workshops


Tutorial on “Mean field stochastic games” (12H), SUPELEC, France (March 29 and April 1, 2011): attended by M. Panda.
9. Dissemination

9.1. Animation of the Scientific Community

9.1.1. Participation in Committees

J.-C. Bermond: Expert for DRTT, and various projects outside France (Canada, Qatar,...); Responsible of the Pôle ComRed of I3S till January 31th; Member of the Ph.D. committee of the University of Marseille; Member of the comité de sélection des ATER till march 15; Member of the I3S laboratory committee (until October).

D. Coudert: Member of the comité du suivi doctoral of INRIA Sophia Antipolis (since January 2009); Member of INRIA working group GT AER; Member of comité de sélection 27e section of UNS, 2011; Member of the scientific board of the GIS ENSL-UNS (CNRS, ENSL, INRIA, UNS) since 2011; Expert for the National Sciences and Engineering Research Council of Canada (NSERC), the Future and Emerging Technologies Open Scheme (FET-Open) European program, and the ANR (ARPEGE, JC-JC, SIMI).

O. Dalle: Member of the comité de sélection 27e section of UNS; Member of the CUMIR committee of INRIA Sophia Antipolis; Expert reviewer for Ministry of Higher Education and Research (MESR) CIR applications (Credit Impot Recherche); Member of the PhD defense committee of P. Vehlo, Univ. Grenoble, July 2011 (reviewer).

F. Havet: Expert for ANR (Agence Nationale de la Recherche) and its analogue in Slovakia VEGA; Member of the I3S laboratory committee (until October); External member of the Doctoral Department I2S committee (Montpellier); Reviewer of the PhD Theses of V. Campos (Federal University of Ceara, Brasil, September 2011) and S. Ghazal (Lebanese University, Lebanon and University of Lyon I, December 2011); Examiner of the PhD Thesis of Anthony Perez (University of Montpellier 2, November 2011).

J. Moulierac: Member of the comité de sélection 27e section of Université de Montpellier II; Member of the CDL (Commission for software development) at INRIA Sophia Antipolis since 2009; Member of the Conseil de Département (Department Committee) of IUT Nice since 2007; Responsible of the International stream Ubinet, Master IFI (http://ubinet.unice.fr), until August 2011.

N. Nisse: Member of the comité de sélection 27e section of Université de la Méditerranée; member of the comité de sélection 27e section of Université de Montpellier II, 2011; co-responsible of the Computer Science course of MPSI, INRIA-Lycée International de Valbonne.

M. Syska: Expert for DRTT PACA; Member of comité de sélection 27e section of UNS, 2011 (ATER, "ad-hoc"); Member of DCCE committee ED STIC; Member of the PhD defense committee of Swann Perarnau (University of Grenoble, December 1st 2011).

9.1.2. Editorial Boards


D. Coudert: Discrete Applied Mathematics.

9.1.3. Steering Committees

D. Coudert: Pôle ResCom du GDR ASR du CNRS (since 2005); Rencontres francophones sur les aspects algorithmiques des télécommunications (AlgoTel).

O. Dalle: **ICST Intl. Conf. on Simulation Tools and Techniques** (SIMUTools).

F. Havet: **Journées Combinatoire et Algorithmes du Littoral Méditerranéen (JCALM); Journées Graphes et Algorithmes (JGA);** GT Graphes du GDR IM du CNRS.

9.1.4. Conference Organization

AlgoTel’11: 13mes rencontres francophones sur les Aspects Algorithmiques des Télécommunications, Agay, France, May 2011; Organizing Chairs: F. Giroire and N. Nisse.

9.1.5. Workshop Organization


9.1.6. Participation in Program Committees

C. Caillouet: 13th Workshop on Advances in Parallel and Distributed Computational Models (APDCM2011), Anchorage, Alaska, USA (May 16, 2011).

D. Coudert: 10th International Symposium on Experimental Algorithms (SEA’11), Chania, Greece (May 5-7, 2011); 13es Rencontres Francophones sur les Aspects Algorithmiques des Télécommunications (AlgoTel’11), Cap Estérel, France (May 23-26, 2011); 18th International Symposium on Fundamentals of Computation Theory (FCT), Oslo, Norway (August 22-25, 2011).


9.2. Participation in Conferences and Workshops

9.2.1. Invited Talks

D. Coudert: Seminar at the MPLA graduate students seminar, University of Athens, Greece (February 25, 2011); Seminar at mathematics department of RWTH Aachen, Germany (November 2, 2011).


9.2.2. Participation in Scientific Meetings


Retreat of the FP7 STREP EULER project, St-Raphael, France (May 10-12, 2011). Attended by D. Coudert and A. Lancin.
Annual meeting of FP7 STREP EULER project, Barcelona, Spain (November 7-9, 2011). Attended by D. Coudert and A. Lancin.


GRATEL: Mid-term Workshop, Taipei (March 11-12, 2011). Attended by N. Cohen (speaker) and F. Havet (speaker).


Mascotte Days: Mascotte project annual seminar, Agay, France (May 26-27, 2011). Attended by most of the MASCOTTE members.


9.2.3. Participation in Conferences


ADHOCNOW: 10th International Conference on Ad Hoc Networks and Wireless, Paderborn, Germany (July 18-20, 2011). Attended by C. Caillouet (speaker).


IWOCA’11: International Workshop on Combinatorial Algorithms, Victoria, Canada (June 20th - June 22nd, 2011). Attended by J. Araújo (speaker).


JPOC7C: La 7ème édition des Journées Polyèdres et Optimisation, Valenciennes, France (8-10 June 2011). Attended by I. Tahiri.


9.2.4. Participation in Schools


JPOC7S: L’école de la 7ème édition des Journées Polyèdres et Optimisation, Valenciennes, France (6-8 June 2011). Attended by I. Tahiri.


9.2.5. Popularization
Attractiveness: Since April 1, J.-C. Bermond is in charge of the attractiveness of the center INRIA Sophia Antipolis Méditerranée.

Colloquium Montpellier: J.-C. Bermond gave a talk at the Colloquium organized in Montpellier on March 31, 2011.


EPU: D. Mazauric gave a talk to the students of Polytech’ Nice, on "Compromis pour le problème du reroutage dans les réseaux optiques" at Sophia Antipolis (March 10, 2011).

Fête de la Science: F. Havet presented the stand "Mathématiques" at Rians, France (October 12-16, 2011).


Science et Culture au Lycée: F. Havet gave two conferences “Graph theory and networks” and “Researcher as a job” in Lycée du Rempart, Marseille, November 24, 2011.

SUP’COM: D. Mazauric gave a talk to the students of SUP’COM, on "Reconfiguration du routage dans les réseaux optiques" at Sophia Antipolis (July 12, 2011).

9.3. Teaching

Licence:
- ASR5 - Networks, 150h, Level L1, IUT Nice Côte d’Azur, University of Nice Sophia Antipolis.
- Introduction to Operating Systems, 40h, Level L1, IUT Nice Côte d’Azur, University of Nice Sophia Antipolis.
- Informatique, 20h, Level L1 (classe préparatoire MPSI), Lycée International de Valbonne.
- IT Tools, 32h, Level L1, IUT Nice Côte d’Azur, University of Nice Sophia Antipolis.
- Programmation fonctionnelle (Scheme), 18h, Level L1, UFR Sciences, University of Nice Sophia Antipolis.
- Database and advanced information system, 36h, Level L2, IUT Nice Côte d’Azur, University of Nice Sophia Antipolis.
- Algorithmique et Programmation, 35h, Cycle Initial Polytechnique 2, École Polytech’Nice, University of Nice Sophia Antipolis.
- Mathématiques discrètes, 64h, Level L3, Ecole Polytech’Nice, University of Nice Sophia Antipolis.
- Advanced Networks, 15h, Level L3, IUT Nice Côte d’Azur, University of Nice Sophia Antipolis.
- Object-Oriented Programming, 54h, L3, Licence Miage, Université de Nice, France.
- Graph Theory, 18h, Level L3, Mathematics Department, RWTH Aachen, Germany.
- Introduction to Algorithms, 36h, Level L3, IUT Nice Côte d’Azur, University of Nice Sophia Antipolis.
- Bash Scripting, 15h, Level L3, IUT Nice Côte d’Azur, University of Nice Sophia Antipolis.
- Linux Systems Administration, 24h, Level L3, IUT Nice Côte d’Azur, University of Nice Sophia Antipolis.
- Algorithmique et complexité, 25h, Level L3, IUT Nice Côte d’Azur, University of Nice Sophia Antipolis.
Master:
- Théorie des graphes, 24h, M1 PENSUNS, University of Nice Sophia Antipolis.
- Combinatoire des graphes, 25h, Level M2, Master MDFI, Université de la Méditerranée - Faculté des sciences de Luminy.
- Probabilistic method, 18h, Master 2 Mathematics, Lebanese University, Beyruth, Lebanon.
- Algorithms for telecommunications, 42h, Level M2, Master IFI (international stream Ubinet), University of Nice Sophia Antipolis.

9.3.1. Administration

Collaboration INRIA-Lycée International de Valbonne: N. Nisse is co-responsible of the Computer Science course of MPSI.

IUT Nice Côte d’Azur: M. Syska is responsible of the Computer Science Department of IUT since September 2011.

Ubinet, Master IFI: J.-C. Bermond is member of the scientific committee.
J. Moulierac was responsible of the International stream Ubinet, Master IFI (http://ubinet.unice.fr), until August 2011.
F. Giroire is responsible of the Internships within international stream Ubinet, Master IFI (http://ubinet.unice.fr), since October 2011.

International Master 1: J.-C. Bermond is member of the scientific committee of the international track of the M1.

9.3.2. PhD & HdR

PhD:
Nathann Cohen, Three years of graphs and music: some results in graph theory and its applications, Université de Nice Sophia Antipolis, October 20, 2011, F. Havet.

PhD in progress:
3rd year:
L. Sampaio, Algorithmic aspects of graph colorings, since November 2009, F. Havet.
I. Tahiri, Optimisation dans les réseaux de collecte IP sans fils, since November 2009, D. Coudert.
M. Toko Worou, Outils algorithmiques pour la détection des communautés, since November 2009, J.-C. Bermond and J. Galtier.

2nd year:
S. Félix, Smart transports : optimisation du trafic dans les villes, since January 2011, J.-C. Bermond and J. Galtier.
A. Lancin, Study of network properties for efficient routing algorithms, since January 2011, D. Coudert.

R. Modrzejewski, Systèmes pair-à-pair de partage de données, since November 2010, S. Pérennes and F. Giroire.


1st year:


B. Li, Study of Internet model and its properties for efficient routing algorithms, since October 2011, D. Coudert and N. Nisse.


9. Dissemination

9.1. Animation of the scientific community

Walid Dabbous served in the programme committees of WNS3’2011, NOMEN’2012, ICC’12 NGN. He is co-editor or a special issue of the PPNA journal on Experimental Evaluation of Peer-to-Peer Applications. He is member of the scientific council of the INRIA Bell-Labs laboratory on Self Organizing Networks. He is an affiliate professor at Ecole Polytechnique, Palaiseau.

Claude Castelluccia served in the program committees of the following international conferences: Wisec2011 and SESOC2011. He is the co-founder of the ACM WiSec (Wireless Security) conference.

Thierry Turletti Senior ACM and IEEE member, served in 2011 in the program committees of the following international conferences: 19th International Packet Video Workshop and 4th ACM Workshop on mobile Video Delivery (Movid). He is member of the Editorial Boards of the Journal of Mobile Communication, Computation and Information (WINET) published by Springer Science and of the Advances in Multimedia Journal published by Hindawi Publishing Corporation.

Chadi Barakat is General Co-Chair of the upcoming ACM CoNEXT 2012 conference on emerging Networking Experiments and Technologies to be held in Nice on Dec 10-13, 2012. He served on the Technical Program Committee for IEEE Infocom 2011 and ACM CoNEXT 2011. He was invited to give talks at the CFIP Conference in Sainte Maxime - 2011. He is currently the scientific referee for international affairs at Inria Sophia Antipolis and member of the Conseil d’Orientation Scientifique et Technologique (COST) at Inria within the working group of international affairs (COST-GTRI).

Vincent Roca is strongly involved in the RMT, FECFRAME and MSEC working groups at the IETF (he was in particular co-chair of the MSEC, Multicast Security working group in 2010-2011).

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


9.2. Teaching

9.2.1. Teaching Activities

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

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

Undergraduate course on Networks and Telecommunications, by Mohamed Ali Kaafar (40h), Ensimag Engineering school, France.
Undergraduate course at Polytech’ Grenoble, on Wireless Communications, by Vincent Roca (12h).
Undergraduate course at IUT, Nice-Sophia Antipolis University, Local Aarea Networks by Chadi Barakat (28h), France.
Undergraduate course at IUP GMI Avignon on Peer-to-peer networks, by Arnaud Legout (38h), France.
Master Crypto and Security: course on Wireless Security by Claude Castelluccia (20h), Ensimag/University of Grenoble, France.
Master MOSIG: course on Wireless Security by Claude Castelluccia (12h), Ensimag/INPG, France.
Master Phelma: course on Computer Networks by Mohamed Ali Kaafar (12h), INPG , France.
Master Ubinet: course on Evolving Internet - architectural challenges by Walid Dabbous and Chadi Barakat 42 hours, University of Nice-Sophia Antipolis, France.
Master RTM: course on Wireless networking by Chadi Barakat, 7h, IUP Avignon, France.
Master CAR: course on Internet monitoring by Chadi Barakat, 3h, Telecom Paris Tech, France.
Master TSM: course on Voice over IP by Chadi Barakat, (7h),University of Nice-Sophia Antipolis, France.
Master Ubinet: course on Peer-to-peer networks, by Arnaud Legout (21), University of Nice-Sophia Antipolis.

9.2.2. Phd students

PhD : Daniele Perito defended his PhD titled “Trustworthy Code Execution on Embedded Devices” on October 13th, at Grenoble University. His thesis was supervised by Claude Castelluccia.
PhD: Stevens Le Blond defended his PhD titled “Is Privacy Dead (in P2P Networks)?” on April 28th. His thesis was co-supervised by Arnaud Legout and Walid Dabbous.
PhD: Rao Naveed Bin Rais defended his PhD titled “Adaptive Communication Mechanisms for Networks with Episodic Connectivity” on February 1st, at University of Nice-Sophia Antipolis. His thesis was supervised by Thierry Turletti.
PhD : Mohamad Jaber defended his PhD titled “Internet traffic profiling and identification” on October 6th at University of Nice-Sophia Antipolis. His thesis was supervised by Chadi Barakat.
PhD: Imed Lassoued defended his PhD titled “Adaptive Monitoring and Management of Internet Traffic” on December 13 at University of Nice-Sophia Antipolis. His thesis was supervised by Chadi Barakat.
PhD in progress : Sana Ben Hamida works on “Embedded System Security” since 2009. Her thesis is supervised by Claude Castelluccia.
PhD in progress : Lukasz Olejnik works on “Internet Tracking and Profiling” since 2011. His thesis is supervised by Claude Castelluccia.
PhD in progress : Min-Dung Tran works on “Privacy-Preserving Ad systems” since 2011. His thesis is co-supervised by Claude Castelluccia and Mohamed Ali Kaafar.
PhD in progress : Abdelberri Chaabane works on “Online Privacy in heterogeneous networks” since September 2010. His thesis is supervised by Mohamed Ali Kaafar.
PhD in progress : Dong Wang works on “Modeling social media and its impact on new digital economy” since September 2011. His thesis is supervised by Mohamed Ali Kaafar.
PhD in progress: Anshuman Kalla works on “Efficient transmission mechanisms for Information Centric Network Architectures” since december 2011. His thesis is co-supervised by Thierry Turletti and Walid Dabbous.
PhD in progress: Shafqat Ur-Rehman works on “Benchmarking in Wireless Networks” since 2008. His thesis is co-supervised by Thierry Turletti and Walid Dabbous.

PhD in progress: Amir Krifa works on “Towards better content dissemination applications for Disruption Tolerant Networks” since 2009. His thesis is co-supervised by Chadi Barakat.

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

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

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

9.2.3. Interns

Ana Nika (from Mar 2011 until Jul 2011)

Subject: Henna: A new naming mechanism for very heterogeneous networks prone to connection disruptions

Institution: National University of Athens (Greece)

Claudio Freire (from March 2011 until Sep 2011)

Subject: Extending NEPI, Adding support for PlanetLab experimentation platform

Institution: Universidad de Buenos Aires (Argentina)

Sandun Wijayarathne (from April 2011 to August 2011)

Subject: Support of mobility in content centric networks

Institution: Ubinet Master, University of Nice-Sophia Antipolis (France)

Mauricio Jost (from April 2011 to August 2011)

Subject: Monitoring the quality of internet access by active probing

Institution: Ubinet Master, University of Nice-Sophia Antipolis (France)

Blerina Lika (from June 2011 to July 2011)

Subject: Rate and error control in content centric network

Institution: National University of Athens (Greece)

Anestasia Fedane (from Feb 2011 to July 2011)

Subject: Privacy in Location-Based Services

Institution: University of Grenoble (France)

Min-Dung Tran (from Feb 2011 to July 2011)

Subject: Information Leakage in Ad systems

Institution: University of Grenoble (France)

William Lecat (from April 2011 to June 2011)

Subject: Differentially private spatial aggregation
Institution: Ecole Polytechnique (France)

Hervé Falciani (from March 2011 to August 2011)
Subject: Personal Data on Content Centric Networking
Institution: Ubinet Master, University of Nice-Sophia Antipolis (France)

Manu Sekar (from Feb 2011 to July 2011)
Subject: Energy versus Security tradeoff in Wireless Sensor Networks
Institution: INPG (France)
7. Dissemination

7.1. Leadership within scientific community

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. He has been a member of the technical programme committee of the conference ACM Sigmetrics and Technical Program Chair (TPC) of the conference Performance.

James Roberts is a Fellow (membre émérite) of the SEE. In 2011, he has been a member of the technical programme committee of the following conferences: Sigmetrics, Networking, CoNext, Performance, ITC.

7.2. Teaching

Mathieu Feuillet is teaching assistant for the course “Traffic, Queueing and Networks” given by Thomas Bonald at Telecom ParisTech. A book (available in French [11] and English [10]) has been written based on this course.

Christine Fricker was reviewer for the thesis defense of Gonçalo Jacinto’s at the University of Lisbon.

Emanuele Leoncini is teaching assistant for the course “Séries et intégrales (étude approfondie)” at University Paris VI.

Philippe Robert gives Master2 lectures “Analyse probabiliste d’algorithmes” 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. He gave a series of lectures at the University of Casablanca and a conference at the Lycée Rosa Park in Montgeron (91).

James Roberts lectured to third year students at Telecom ParisTech on “Traffic management and the future Internet”. He was reviewer for the thesis defense of M. Dirani (Paris VI).

7.3. Conference and workshop committees, invited conferences

Mathieu Feuillet gave a talk at the conference CISS’2011 in Baltimore (March 2011), an invited talk at the workshop YEQT in Eindhoven (October 2011) and a set of two lectures as an invited researcher in Montevideo, Uruguay (December 2011).

Christine Fricker gave an invited talk on ‘Performance of passive optical networks’ at Lisbon University 11/1-03. She visited Lisbon and Algrave Universities in Portugal (one week). She gave an invited talk on Mean field for large bike sharing systems at Informs Conference on Applied Probability, Stockholm, 11/14-07. Her co-author N. Gast gave an invited talk on their joint work in a sponsored session on operational aspects of bike sharing systems in the INFORMS Annual Meeting at Charlotte, North Carolina, November 13-16, 2011.

Emanuele Leoncini participated at the conferences “European Conference on Mathematical and Theoretical Biology” in Krakow (June 2011) and “INFORMS” in Stockholm (July 2011).

Philippe Robert gave a talk at the University of Marne la Vallée at the PDMP conference and a plenary talk at the conference INFORMS in Stockholm.

James Roberts gave a keynote presentation at the European Teletraffic seminar at Poznan (Feb), an invited talk at the ResCom workshop in Paris (Oct) and an invited talk at the COMET-ENVISION Workshop in London (Nov).
RESO Project-Team

9. Dissemination

9.1. Animation of the scientific community

Paulo Gonçalves

– Editorial board: EURASIP, officier of the Local Liaison Board
– Reviewing committee: IEEE Trans. on Signal Processing, Colloque GRETSI,

Laurent Lefèvre

– Conference and events organization:
  * Co-organizer of Entretiens Jacques Cartier : Colloquium on “Information and Communications Technologies: Are they Green ?”, Montreal, Canada, October 3-4, 2011
  * Co-organizer of the Green Days @ Paris event: “Energy efficiency : how to apply our models and solutions in production infrastructures ?”, Paris, France, May 31 and June 1, 2011

Isabelle Guérin Lassous

– Editorial board: Computer Communications (Elsevier), Ad Hoc Networks (Elsevier) and Discrete Mathematics and Theoretical Computer Science.
Thomas Begin
– University committee: Member of the LIP laboratory council since February 2010, Member of one PhD jury

Olivier Glück
– University committee: Member of the CEVU (Conseil des Etudes et de la Vie Universitaire) of University Lyon 1, Member of the UFR Faculté des Sciences et Technologies faculty council of University Lyon 1, Member of the computer science department council of University Lyon 1, Member of one PhD jury

Jean-Patrick Gelas
– University committee: Master (M2) jury.

9.2. Teaching

Thomas Begin
Licence : Réseaux, 18 heures, niveau L3, Université Lyon 1, France
Master : Réseaux, 60 heures, niveau M1, Université Lyon 1, France
Master : Réseaux avancés : architecture et protocoles, 12 heures, niveau M2, ENS Lyon, France
Master : Réseaux avancés, 56 heures, niveau M2, Université Lyon 1, France
Master : Architecture des réseaux, 18 heures, niveau M2, Université Lyon 1, France

Jean-Patrick Gelas
Master : Réseaux avancés : IPv6 and IP routing, 40 h, niveau M2, Université Lyon 1, France
Master : Architecture des réseaux : Router under the hood, 6h, niveau M2, Université Lyon 1, France
Master : Systèmes d’exploitation, 24h, niveau M2, Université Lyon 1, France
Master : Réseaux, 35h, niveau M2, Université Lyon 1, France
Master : Systèmes et logiciels embarqués, 45h, niveau M2, Université Lyon 1, France

Paulo Gonçalves
Master : Responsible for the teaching axis “Models and Optimization for Emergent Infrastructure”. Master (M1/M2) of the Department of Computer Sciences, ENS Lyon (Informatique fondamentale)
Olivier Glück
Licence : Initiation Réseaux, 9 heures, niveau L2, Université Lyon 1, France
Licence : Réseaux, 2x70 heures, niveau L3, Université Lyon 1, France
Master : Services et Protocoles Avancés sur Internet, 30 heures, niveau M2, Université Lyon 1, France
Master : Administration des Systèmes et des Réseaux, 16 heures, niveau M2, Université Lyon 1, France
Master : Réseaux avancés : architecture et protocoles, 6 heures, niveau M2, ENS Lyon, France

Isabelle Guérin Lassous
Master : Réseaux ad hoc, 12 heures, niveau M1, Université Lyon 1, France
Master : Qualité de Service et Systèmes Communicant Multimédia, 40 heures, niveau M2, Université Lyon 1, France
Master : Réseaux du Futur, 5 heures, niveau M2, Université Lyon 1, France
Master : Réseaux, 21 heures, niveau M2, Université Lyon 1, France
Master : Réseaux sans Fil, 33 heures, niveau M2, Université Lyon 1, France
Master : Outils pour la recherche, 4 heures, niveau M2, Université Lyon 1, France
Master : Qualité de Service et Contrôle de Trafic, 30 heures, niveau M2, Ecole Supérieure d’Ingénieurs Réunion Océan Indien
Master : Réseaux sans Fil, 10 heures, niveau M2, Ecole Supérieure d’Ingénieurs Réunion Océan Indien

Laurent Lefèvre
Master : Advanced Networks : green, autonomic and robust networks, 48 heures, niveau M2, Addis Abeba University, Ethiopia
Master : Réseaux avancés : architecture et protocoles, 6 heures, niveau M2, ENS Lyon, France

PhD in progress : Thiago Abreu, “Integration of traffic awareness in substitution networks”, Mar. 1, 2011, I. Guérin-Lassous (Dir.) and T. Begin
PhD in progress: Inès Doghri, "Multipath Techniques for Heterogeneous Multihop Wireless Networks", Dec. 15, 2008, I. Guérin Lassous (Dir.) and L. Reynaud (Orange)


PhD in progress: Ghislain Tsafack Chetsa, "Energy profile and green levers for applications and services over large scale and distributed infrastructures", (2011-2014), L. Lefèvre (Dir.) and J.-M. Pierson (IRIT, co-dir.)

PhD in progress: Van Nam Nguyen, "Quality of Service in Heterogeneous Networks", Dec. 15, 2009, I. Guérin Lassous (Dir.) and V. Moraru (IFI, Vietnam)

9.3. Invited presentations

Paulo Gonçalves

Fractals and Related Fields II, Porquerolles (France), June 13-17, 2011. Invited speaker.

Olivier Glück


Isabelle Guérin Lassous

QoS issues in multihop wireless networks, UPC, Barcelona (Spain), June 6-10, 2011, Invited seminar (4 days).
8. Dissemination

8.1. Leadership within the scientific community

8.1.1. Participation in Committees

Jean-Marie Gorce: nominated as a member of CNU61 in December 2011, member of the “Expert for recruiting committees of 27e section” in INSA Lyon; expert reviewer for the French National Agency for Research (ANR) and for ANRT for CIFRE projects.

Marine Minier: member of the “Expert for recruiting committees of 27e section” of the Université de Nice and Université de Saint-Etienne.

H. Rivano: elected member of the CNRS National Committee and member of recruiting CNRS committees of section 07 for Chargé de Recherche et Directeur de Recherche.

Fabrice Valois: Invited professor of Shanghai JiaoTong University (February-July). Member of "atelier thématique A3 STIC-NANO " of the "Service de la Stratégie Nationale de la Recherche et de l’Innovation" for the minister of research.

8.1.2. Editorial Boards


Tanguy Risset: Integration, the VLSI Journal.

Jean-Marie Gorce, Guillaume Villemaud: Guest editors for a special issue of Eurasip Journal of Wireless Communications and Networking on wireless channel and propagation.

8.1.3. Conferences and workshops organization


Hervé Rivano: Member the steering committee of ResCom in GDR ASR.

Bernard tourrenchau: Organizer of "Journées IP Capteurs" (January, Lyon, France).

Fabrice Valois: Organizer of "Journées IP Capteurs" (January, Lyon, France). Organizer and member of the steering committee of RESCOM.

8.1.4. Participation in program committees


Fabrice Valois: Algotel 2011 (Mai, Cap Esterel, France), CFIP(Mai, Nice, France), VTC-Spring (May, Budapest, Hungary), ICC 2011 (June, Kyoto, Japan), IWCMC (June, Istanbul, Turkey), SensorComm (August Côte d’Azur, France), iCOST (October, Shanghai, China), WiMob (October, Shanghai, China), WPMC (October, Brest, France), Globecom 2011 (December, Houston, USA).
8.2. Theses, Internships

8.2.1. Theses

8.2.1.1. Theses defended in 2011


8.2.1.2. Theses in preparation


Cédric Chauvenet: “IPv6/6LoWPAN network architecture design over low power”, CIFRE Watteco/CITI grant, since 02/2010.


Cengis Hasan: “Optimization of resource allocation for small cells networks”, Orange labs grant, since 01/2010.

Aissa Khoumeri: “low power and low cost architectures for wireless networks”, FUI Ecnohome grant, since 10/2011.

Quentin Lampin: “QOS and time-constrained WSN Networks”, Orange labs grant, since 01/10/2009.

Matthieu Lauzier: “Design and evaluation of information gathering systems for dense mobile wireless sensor networks”, Euromedia grant, since 01/10/2011.


Alexandre Mouradian: “Proposition et validation de protocoles de communication temps-réel pour les réseaux de capteurs sans fil”, ANR ARESA2 grant, since 10/2010.

Anis Ouni: “Optimization of capacity and energy consumption in wireless mesh networks”, ECOSCells project grant, since 10/2009.


8.2.2. Participation in thesis Committees

Jean-Marie Gorce: thesis of Anya Apavatjrut (July, Lyon, INSA Lyon)[Director],

Claire Goursaud: thesis of Anya Apavatjrut (July, Lyon, INSA Lyon)[Director],

Marine Minier: thesis of Baudoin Collard (January 2011, Louvain-La-Neuve - Belgium, UCL).[October, Lyon, INSA LYON][examinator].

Hervé Rivano: thesis of Julien Champ (December, Montpellier, ED ISS)[Examinator], thesis of Florent Hernandez (November, Montpellier, ED ISS)[Examinator].

Marco Fiore: thesis of Razvan Stanica (November, Toulouse, ENSIEEHT)[Examinator].

Bernard Tourancheau: thesis of Leila Ben Saad (November, Lyon, ENS Lyon)[Director].

Fabrice Valois: HDR of Aline C. Viana (December, Paris, Université de Paris 6)[examinator], thesis of Yacine Mezali (december, Orsay, École Polytechnique)[reviewer], thesis of Stéphane Pomportes (December, Paris, Université Paris-Sud)[reviewer].

Guillaume Villemaud: thesis of Cédric Lévy-Bencheton (May, Grenoble, INSA Lyon)[Director].

Tanguy Risset: thesis of Sajjad Khawar (February, Versailles, Université de Versailles)[reviewer], thesis of Cédric Lévy-Bencheton (May, Grenoble, INSA Lyon)[Director], thesis of Erwan Raffin (July, Rennes, Université de Rennes)[reviewer], thesis of Nicolas Pouillon (September, Paris, Université Paris 6)[Examinator].

8.2.3. Internships

Yesser Bouguerra [PFE student]: Mécanismes d’allocations d’adresses dans les réseaux multi-saut (Marco Fiore, Fabrice Valois)

Arthur Caillau [License student]: Developpement d’un outil d’étude des reseaux radio maillés (Herve Rivano)

Mickael Dardaillon [Master student]: Implementation materielle d’algorithmes de cryptographie pour les reseaux de capteurs (Tanguy Risset, Cédric Lauradoux)

Ghuzlan Hasan [Master student]: Communication IPv6 pour reseau de capteurs (Bernard Tourancheau)

Bilel Fersi [PFE student]: Voting Algorithms for Intrusion Detection in WSNs (Cedric Lauradoux, Isabelle Auge-Blum)

Antoine Fossaluzza [PFE student]: Evaluation de la propagation de signaux en environnements vehiculaires (Marco Fiore)

Fraga Fraga Iago [PFE student]: Analyse complexe de réseaux de connectivité véhicule (Marco Fiore)

Silvana Hernandez Jaramillo [Master student]: Evaluation des canaux de transmission de type Femtocells (Guillaume Villemaud, Florin Hutu)

Massimo Montalto [PFE student]: Evaluation de la propagation de signaux en environnements vehiculaires (Marco Fiore)

Petru Polacek [Master student]: Design of Low power, low cost physical layer architectures for the new generations of home area networks (Florin Hutu, Guillaume Villemaud)

Damien Reimert [Master student]: Environnement de simulation pour capteurs Indoor (???)

Chakroun Selima [Master student]: Mécanismes d’allocations d’adresses dans les réseaux multi-saut (Marco Fiore, Fabrice Valois)
Dounia Zaidouni [Master student]: Optimization of vehicular access in presence femto-cell road coverage (Marco Fiore, Herve Rivano)

Yin Zhang [PFE student]: Développement d’une couche MAC pour un réseau BAN (???)

8.3. Teaching

The members of SWING are heavily involved in teaching activities at Telecommunications department of INSA Lyon (master 1 and 2 level). Tanguy Risset, Jean-Marie Gorce and Fabrice Valois are professor in the Telecommunications department of INSA Lyon. Claire Goursaud and Isabelle Augé-Blum are associate professor in the Telecommunications department of INSA Lyon. Jean-Marie Gorce was the vice-head of the Telecommunications department of INSA Lyon until september 2009, and since he has been replaced by Tanguy Risset. The teaching is carried out by members of INSA Lyon as part of their teaching duties, and for INRIA/CNRS or PhD’s as extra work.

Some members are involved in the teaching activity of other departments of INSA Lyon. Marine Minier is associate professor in the Computer Science department of INSA Lyon. Jacques Verdier, Florin Hutu and Guillaume Villemaud 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. Bernard Tourrencheau is involved in the teaching activity at University of Lyon in different masters. Some members are also involved in administrative duties related to teaching at University of Lyon. Tanguy Risset is the responsible for the Networking program of the Master Mastria from University of Lyon, and Jean-Marie Gorce is the responsible for the Telecommunications program of the future Master EEAP from University of Lyon. Bernard Tourrencheau

Moreover, the SWING team is involved in international teaching program. Fabrice Valois is the head of a Special program of Engineering in Telecommunications between INSA Lyon and Shanghaï - Jiao Tong University.

The members of SWING also supervise several student projects and internships at all levels (Master 1 and 2, Engineering Schools).

Altogether that represents more than 2400 hours per year.

8.4. Participation in conferences and workshops

8.4.1. Participation in conferences/workshops/schools

Anya Apavatjrut: PIMRC 2011 (September, Toronto, Canada).

Ahmed Benfarah: SecureNets (May, Paris, France), Summer school on “Topics in Wireless Networks Security” (May, Milano, Italy), ICUWB 2011 (September, Bologne, Italy).

Leila Ben Saad: Journées scientifiques du cluster ISLE Semb (Octobre, Valence, France), NTMS 2011 (February, Paris, France), Sensorcomm (August, Nice, France), Wimob (October, Shanghai, China).

Cédric Chauvenet: Journées scientifiques du cluster ISLE Semb (Octobre, Valence, France).

Paul Ferrand: IWPCM (March, Lyon, France), EuCAP (April, Roma, Italy), COST IC1004 (October, Lisbonne, Portugal).

Virgile Garcia: VTC-Fall 2011 (September, San Francisco, USA), PIMRC 2011 (September, Toronto, Canada), Séminaire Self-Net(January, Versailles, France).

Marco Fiore: IEEE Infocom 2011 (April, Shanghai, China), IEEE/IFIP MedHocNet 2011 (June, Favignana, Italy).

Katia Jaffres-Runser: NetCod 2011 (July, Beijing, China).

Nikolai Lebedev: OptNet 2011 workshop (September, Sheffield, UK).
Cédric Lauradoux: WISEC 2011 (June, Hamburg, Germany), Journées scientifiques du cluster ISLE Semba (October, Valence, France).

Meiling Luo: Eucap 2011 (April, Roma, Italy), VTC-Fall 2011 (September, San Francisco, USA).

Marine Minier: FSE 2011 (February, Lyngby, Danemark), INetSec 2011 (June, Luzern, Switzerland), séminaire CCA (January, Paris, France).

Alexandre Mouradian: ETR11 (August, Brest, France), RESCOM réseaux (October, Paris, France).

Anis Ouni: PIMRC’11 (September, Toronto, Canada), VTC2011-Spring (May, Budapest, Hungary), SNOW’11 (March, Sälen, Sweden), RESCOM 2011 (October, Paris, France).

Tanguy Risset: CGO 2011 (April, Chamonix, France).

Hervé Rivano: Algotel 2011 (May, Cap Estérel, France), PIMRC 2011 (September, Toronto, Canada), ResCom (November, Lyon, France).


Fabrice Valois: IN’Tech (January, Grenoble, France), IEEE Infocom 2011 (April, Shanghai, China), Sensor-Comm (July, Venice, Italy), ResCom (October, Paris, France), journée "Prospective Recherche : rencontres TPE/PME/PMI - recherche universitaire” (October, Paris, France).


Jean-Marie Gorce: IC904 Cognitive radio Cost meeting, October 2011 (Barcelona), IC1004 green cooperative communications meeting, October 2011 (Lisbon), IWPCM February 2011 (Lyon).
9. Dissemination

9.1. Animation of the scientific community

TREC’s seminar The following scientists gave talks on Trec’s seminar in 2011 (see http://www.di.ens.fr/~trec/seminar.html for details)

Michel Mandjes (University of Amsterdam) /Nov 30/ Talking on: "Birthday surprises",
Prashant Mehta (University of Illinois at Urbana-Champaign) /Oct 14/ Talking on: "Feedback Particle Filter: A New Formulation for Nonlinear Filtering based on Mean-field Theory",
Anastasios Giovanidis (TREC) /Sep 23/ Talking on: "Measurement Based Self-Optimization in Random Access Communications",
Anne Bouillard (TREC) /Sep 22/ Talking on: "Residuation of tropical series: rationality issues",
Naoto Miyoshi (Tokyo Institute of Technology) /Sep 7/ Talking on: "Limiting size index distributions for ball-bin models with Zipf-type frequencies",
Justin Salez (TREC), PhD thesis defense /Jul 4/ Talking on: "Quelques conséquences de la convergence locale faible pour les graphes aléatoires",
Hamed Amini (TREC), PhD thesis defense /Jun 24/ Talking on: "Epidémies et Percolation dans les Graphes Aléatoires",
Shenghao Yang (INC, The Chinese University of Hong Kong) /Jun 23/ Talking on: "BATS Codes: when Network Coding Meets Digital Fountain",
Van Minh Nguyen (TREC), PhD thesis defense /Jun 20/ Talking on: "Wireless Link Quality Modelling and Mobility Management Optimisation for Cellular Networks",
I-Hong Hou (University of Illinois at Urbana-Champaign) /Jun 15/ Talking on: "Supporting Delay Guarantees over Unreliable Wireless Channels",
Giovanni Luca Torrisi (IAC Mauro Picone Italy) /May 26/ Talking on: "Density estimation of functionals of spatial point processes with application to wireless networks",
Richard Emilion (Université d’Orléans) /May 16/ Talking on: "Hierarchical Dirichlet Models",
Kristen Woyach (UC Berkeley) /Apr 29/ Talking on: "Crime and Punishment for Cognitive Radios",
Amin Coja-Oghlan (University of Warwick) /Apr 8/ Talking on: "Phase transitions and computational complexity",
Ilkka Norros (VTT, Finland) /Mar 30/ Talking on: "Stability problems of two-chunk file-sharing systems",
Michel Mandjes (University of Amsterdam & EURANDOM & CWI) /Mar 25/ Talking on: "Resource dimensioning through buffer sampling",
Bruno Kauffmann (Orange Labs and INRIA/ENS), PhD thesis defense /Mar 24/ Talking on: "Inverse Problems in Networks"
Darryl Veitch (University of Melbourne) /Mar 23/ Talking on: "La synchronisation d’horloges à travers l’internet",
Irene Marcovici (LIAFA) /Feb 17/ Talking on: "Probabilistic cellular automata, invariant measures, and perfect sampling",
Stefan Haar (LSV) /Feb 10/ Talking on: "When you don’t have a Free Choice",
Victor Bapst (Laboratoire de Physique Théorique, ENS) /Jan 26/ Talking on: "On the spectrum of random regular graphs with random edges weights",
Armand Makowski (University of Maryland) /Jan 24/ Talking on: "Recent results for random key graphs: Connectivity, triangles, etc.",
Nicolas Broutin (INRIA) /Jan 13/ Talking on: "La limite d’échelle des graphes aléatoires critiques",
Nadir Farhi (TREC, INRIA/ENS) /Jan 7/ Talking on: "Packetization and aggregate service in network calculus"

TREC’s Reading group The reading group on Random Graphs is animated by A. Bouillard and A. Giovanidis; see http://www.dm.ens.fr/~bouillar/GdL/index.html

9.2. Teaching

ENS Paris
– Undergraduate course (master level, MMFAI) by M. Lelarge and J. Salez, on Information Theory and Coding (24h + 24h of exercise session).
– Course on Communication Networks (master level, MMFAI) by F. Baccelli, A. Bouillard and A. Bušić (24h + 24h of exercise sessions).
– Course on Network Modeling (master level, MPRI) by F. Baccelli and A. Bouillard (24h)
– Undergraduate course (master level, MMFAI) by F. Baccelli, A. Bouillard and P. Brémaud, on Random Structures and Algorithms (35h + 28h of exercise session).
– Undergraduate exercise session (master level, MMFAI) by A. Bouillard on formal languages, computability and complexity (28h).

ENS Cachan - Antenne de Bretagne
– Preparation to the oral exams of the agregation of mathematics (computer science option) by A. Bouillard (12h).

UPMC, Paris 6
– Graduate Course on point processes, stochastic geometry and random graphs (program "Master de Sciences et Technologies"), B. Błaszczyszyn and L. Massoulié (45h).
– Undergraduate course onconception of algorithms and applications (Licence Informatique, 3rd year), A. Bušić (24h)

Université Paris 10
– Preparation to the certification C2i by A. Benabid (36h)

Université de Versailles Saint-Quentin-en-Yvelines
– Graduate course on simulation (M2 COSY), A. Bušić (6h).

Tutorials
– Lectures on Clustering, percolation and convex ordering of point processes, during Summer Academy on “Stochastic Analysis, Modelling and Simulation of Complex Structures”, Söllerhaus, Austria, September 2011; http://www.uni-ulm.de/mawi/summer-academy-2011/ by B. Błaszczyszyn (4h).

– Ecole de Recherche ENS Lyon 10-14 janvier 2011. 25 hours of lectures of F. Baccelli on stochastic geometry.

– Kyoto University, January 2011, Department of Systems Science, 3 lectures of F. Baccelli on “Stochastic Geometry and Wireless Networks”.

– Chinese University of Hong Kong, July 2011, EECS Dept., 3 lecture of F. Baccelli on “Stochastic Geometry and Information Theory”.


PhD advising

PhD: Bruno Kauffmann, “Inverse Problems in Networks”, defended on March 24, 2011; adviser F. Baccelli; see [6].

PhD: Van Minh Nguyen, “Modélisation des Liens de Communication Radio et Optimisation de la Gestion de Mobilité dans les Réseaux Cellulaires”, defended on Jun 20, 2011; adviser F. Baccelli; see [7].


PhD: Justin Salez, “Quelques conséquences de la convergence locale faible pour les graphes aléatoires”, defended on July 4, 2011; adviser F. Baccelli and M. Lelarge; see [8].

PhD in progress: Emilie Coupechoux, “Analysis of large random graphs”, started in September 2009, adviser M. Lelarge, F. Baccelli;

PhD in progress: Kumar Gaurav, “Convex comparison of network architectures” started in October 2011, adviser B. Błaszczyszyn;

PhD in progress: Mir Omid Haji Mirsadeghi, “Routing on Point Processes”, started in 2009, adviser F. Baccelli;

PhD in progress: Mathieu Leconte, “Propagation d’information et recommandations dans les réseaux sociaux”, started in January 2011, adviser M. Lelarge, F. Baccelli;

PhD in progress: Frédéric Morlot, “Mobility Models for Communication Networks”, started in 2008, adviser F. Baccelli;


9.3. Invitations and Participation in Conferences

François Baccelli

– Keynote or Colloquium Lectures at the
* Colloquium, Department of Mathematics, UT Austin, October 2011. Lecture on “Phase Transitions in Stochastic Network Dynamics”.


– Presentations in the following conferences or seminars


* Workshop on stochastic geometry - Université de Lille, April 2011. Lecture on “Information–Theoretic Capacity and Error Exponents of Stationary Point Processes under Random Additive Displacements”.


* UT Austin, ECE Department, October 2011. Lecture on “Performance Evaluation and Design of Communication Networks with Random Spatial Components”.

* ICERM Workshop “Novel Applications of Kinetic Theory”, Brown University, USA, October 2011. Lecture on “Transport Equations for Internet Transmission Control”.


– Member of the TPC of IEEE Infocom 2011.

Abir Benabid

– Participation in the following conferences:

* WCTT 2011, Vienna, Austria, November 2011; [http://www.wctt.info/](http://www.wctt.info/)

Bartłomiej Błaszczyszyn

– Presentation in the following conferences or seminars


* Summer Academy on “Stochastic Analysis, Modelling and Simulation of Complex Structures”, Söllerhaus, Austria, September 2011; [http://www.uni-ulm.de/mawi/summer-academy-2011/](http://www.uni-ulm.de/mawi/summer-academy-2011/); invited talk

* Journé scientifique "Graphes aléatoires", l’Institut Elie Cartan, Nancy, October 2011; [http://www.iecn.u-nancy.fr/~chassain/homepage/Graphes aleatoires et reseaux sans fil](http://www.iecn.u-nancy.fr/~chassain/homepage/Graphes aleatoires et reseaux sans fil); invited talk

Anne Bouillard

- Member of the program committee of the WCTT workshop (worst-case traversal time) affiliated with the RTSS2011 conference
- Presentation in the following conferences or seminars:
  * WCTT 2011, Vienna, Austria, November 2011; http://www.wctt.info/
  * LSV seminar, ENS Cachan, March 2011; http://www.lsv.ens-cachan.fr/Seminaire/
  * TREC seminar, INRIA Paris, September 2011; http://www.di.en.s.fr/~trec/seminaire.html
  * 68NQRT seminar, INRIA/IRISA, September 2011; http://68nqrt.inria.fr/
  * WEED annual meeting, INRIA Paris, November 2011; http://afsec.asr.cnrs.fr/?p=212
  * SDA2 annual meeting, Caen, June 2011; https://jsda2-2011.greyc.fr/node/3
- Participation in the following conferences:

Ana Bušić

- Presentation in the following conferences or seminars:
  * 49th Annual Allerton Conference on Communication, Control, and Computing, Monticello, IL, USA, September 2011; http://www.csl.uiuc.edu/allerton/
  * 5th Young European Queueing Theorists (YEQT) workshop, October 2011 (invited); http://www.eurandom.tue.nl/events/workshops/2011/YEQTV/
  * Probability Seminar, Department of Mathematics, University of Zagreb, Croatia, May 2011; http://web.math.hr/~goranc/seminar/
  * LACL seminar, University Paris 12, France, January 2011; http://lacl.univ-paris12.fr/Labo/seminaire.html
- Participation in the following conferences:

Chung Shue Chen

- Editor of European Transactions on Telecommunications (Journal)
- International Editorial Board of Internet of Things (Journal)
- Presentation in the following conferences or seminars:

Emilie Coupechoux

- Presentation in the following conferences or seminars:
  * APS Conference, Stockholm (Sweden), July 2011; http://www.informs.org/Community/Conferences/APS2011
  * NetGCoop Conference, Paris, October 2011; http://netgcoop.imag.fr/
  * Séminaire de Probabilités, Nanterre, November 2011; http://www.u-paris10.fr/61454289/0/fiche___pagelibre/

Nadir Farhi

- Presentation in the following conferences or seminars:
  * ILAS(International Linear Algebra Society Conference), Braunschweig, Germany, August 2011 http://ilas2011.de/

Yogeshwaran Dhandapani

- Presentation in the following seminars:
  * University of Rouen, Rouen, France. February 2011.
  * University of Bath, Bath, UK. April 2011.
  * University of Orleans, Orleans, France. May 2011.
  * Indian Statistical Institute, Bangalore, India. July 2011.
  * TIFR Centre for Applicable Mathematics, Bangalore, India. August 2011.

- Participation in the following conferences:
  * Random Structures and Dynamics, Oxford, April 2011; http://www.maths.ox.ac.uk/events/conferences/random-structures-and-dynamics

Marc Lelarge

- On sabbatical in the Electrical Engineering Department of Stanford University from September to December 2011, working with Andrea Montanari on message passing algorithms for compressed sensing.

- Presentation in the following conferences or seminars:
  * Stochastic Activity Month EURANDOM, Eindhoven, April, 2011; http://www.eurandom.tue.nl/events/workshops/2011/SAM/Seminars/Seminars_SAM.html#Lelarge
  * WIDS MIT, Boston, June, 2011; http://wids.lids.mit.edu/
Mir Omid Haji Mirsadeghi
- Participation in the following conferences:
  - Stochastic Geometry days, Lille, March 2011; http://math.univ-lille1.fr/~heinrich/geostoch2011/

Frédéric Morlot
- Presentation in the following conferences or seminars:
- Participation in the following conferences:

Van Minh Nguyen
- Member of the organization committee of VnTelecom conference http://conferences.vntelecom.org/home
- Member of the program committee of ICC 2011,
- Presentation in the following conferences or seminars:
  - VnTelecom conference, Paris, November 2011

Furcy Pin
- Presentation in the following conferences or seminars:

Justin Salez
- Presentation in the following conferences or seminars:
  - Seminaire de Probabilites de l’Institut Elie Cartan, Nancy (France), January 2011; http://www.iecn.u-nancy.fr/~probstat/Les-Seminaires
  - Workshop on Stochastic Networks and Related Topics, Bedlewo (Poland), May 2011; http://www.math.uni.wroc.pl/~lorek/bedlewo2011/
  - Seminaire de l’equipe INRIA Reseaux, Algorithmes et Probabilites, Rocquencourt (France), June 2011; https://www-roc.inria.fr/twiki/bin/view/RAP/PastSeminars2011
  - UC Berkeley Probability Seminar, Berkeley (USA), September 2011; http://www.stat.berkeley.edu/cgi-bin/events.cgi?se=776&period=past_future

Aleksander Wieczorek
- Presentation in the following conferences or seminars: