Activity Report 2014

Section Popularization

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9.4. Popularization

- Sylvie Boldo (Proval project) and Jean-Michel Muller wrote a popular science paper *Des ordinateurs capables de calculer plus juste* in the journal *La Recherche* [36].
- Nicolas Brisebarre co-organizes scientific conferences, called «Éclats de sciences», at Maison du Livre, de l’Image et du Son in Villeurbanne. Around three conferences take place per year.
- Nathalie Revol gave talks for pupils at collèges and lycées, as an incentive to choose scientific careers: lycée Camille Vernet (Valence, Drôme), lycée Jérémie de la Ville (Charlieu, Loire), lycée Gabriel Fauré (Annecy, Haute-Savoie), collège Jean Renoir (Neuville-sur-Saône, Rhône). During the “Week of mathematics”, she gave a 2-hour talk at lycée de la Côte (La Boisse, Ain). She gave the inaugural conference of the congress “Math en Jean’s” in Lyon and the conference for the scientific camp “Math C2+” in Montbonnot. She was present for the “Mondial des Métiers” (Eurexpo Lyon, Chassieu, Rhône). For the Science Fair, she gave 2 talks at MMI, ENS de Lyon. In 2014, she met over 1000 pupils.
9.3. Popularization

- Alain Darte was invited to give a long keynote (1h30), as an introduction to polyhedral techniques ("Polyhedral optimizations? Not even scared!" [2]), to the Spanish Conference Jornadas Sarteco, the equivalent of the French COMPAS conference, see http://www.jornadassarteco.org/transparencias-de-las-charlas- invitadas/.

- In Sep. 2014, together with ten other specialists in automatic parallelization, Paul Feautrier recorded a lecture on the “polyhedral model” for a video course on automatic parallelization to be published by the IEEE.


- Alain Darte participated to the “Refresh” Inria Rhône-Alpes initiative, for improving the scientific life of the Inria regional center, as well as to the working group on “team management”.

9.3. Popularization

H. Garavel participates to the committee in charge of organizing the Aerospace Valley series of industrial conferences on formal methods. The third conference, devoted to theorem proving, held on February 4 in Toulouse and retransmitted by video-conference in Grenoble, attracted over 100 participants from industry and academia.

The fourth conference, devoted to model checking, held on October 16 in Toulouse and retransmitted by video-conference in Grenoble and Saclay, attracted over 120 participants from industry and academia. H. Garavel gave a talk entitled “Présentation de l’outil CADP”. A. Kriouile gave a talk entitled “Application de CADP à la vérification de matériel”. R. Mateescu gave a talk entitled “Introduction au model checking”.

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0 http://www.inria.fr/centre/grenoble/agenda/forum-methodes-formelles2
0 http://projects.laas.fr/IFSE/FMF/04/index.html
8.3. Popularization

- Stéphane Frénot and Stéphane Grumbach have been invited speakers to the BlendWebMix conference in Lyon end of October. This event of two days unites actors from different fields in the web domain, i.e. programmers, entrepreneurs, designers and scientists. Two contributions have been programmed for DICE to speak about digital and geographical territories, and about big data and intermediation platforms.

- The annual German-speaking conference DNP14 in Vienna (Austria) is a two-day event to discuss topics related to data, networks and politics and has taken place this year in September. Robert Riemann was giving a talk to introduce the concept of the C3PO project and illustrate its possibilities of application.

- Metroscope aims at being a leading Internet Observatory. It holds an annual workshop. Aurélien Faravelon presented DICE’s works on intermediation at the 2014 edition.


GCG Team (section vide)
### PRIVATICS Project-Team

#### 8.3. Popularization

- Interview of Mathieu Cunche on Radio Canada in the chronicle of Janic Tremblay, 3rd February 2014.
- Interview of Mathieu Cunche on Radio France Inter in “Journal de 18h”, February 28th 2014.
- Interview of Mathieu Cunche on Radio France Info in “Tout comprendre” chronicle, March 18th, 2014.
- Interview of Mathieu Cunche in Ouest-France newspaper, May 10th, 2014.
- Participation of Mathieu Cunche to the TV show "Le Monde en Face" on France 5, June 17th, 2014.
- Participation of Mathieu Cunche to the round table “Numériquement vôtre” at Futur en Seine, June 14th, 2014.
- Interview of Vincent Roca and Mathieu Cunche, “Comment brouiller sa trace dans les réseaux?” Sciences et Avenir, issue 809, July 2014.
- Seminar of Daniel Le Métayer, at the Cybersecurity Forum (ETH Zurich), 2014.
- Participation of Daniel Le Métayer to a panel on privacy by design at the Annual Privacy Forum (APF 2014, Athens).
- Participation of Daniel Le Métayer to Panel on at Computers Privacy and Data Protection (CPDP 2014 – Brussels).
- Nomination of Daniel Le Métayer at the Commission of the French Parliament “Commission de réflexion et de propositions ad hoc sur le droit et les libertés à l’âge du numérique.”
- Organization of a seminar on privacy for the COERLE (Inria) by Claude Castelluccia and Daniel Le Métayer, November 2014.
SPADES Team (section vide)
BIPOP Project-Team (section vide)
MISTIS Project-Team (section vide)
NANO-D Project-Team (section vide)
NECS Project-Team

9.3. Popularization


- The team has organized the Hycon2 Show day in May 2014 with technical presentations and posters on traffic modeling, estimation and control. We got more than 40 registered peoples from different universities and compagnies, [http://www.inria.fr/en/centre/grenoble/calendar/hycon2-show-day-traffic-modeling-estimation-and-control](http://www.inria.fr/en/centre/grenoble/calendar/hycon2-show-day-traffic-modeling-estimation-and-control).

- The team has organized the 1st technical SPEEDD meeting in May 2014 with a specific visit organized to the traffic center (DIR-CE, Grenoble).
8.3. Popularization


J.-A. Désidéri is a consultant at ONERA (The French Aerospace Lab) and participates in the scientific activities of DSNA (Department of Numerical Simulation and Aeroacoustics, Châtillon) and DAAP (Department of Applied Aerodynamics, Meudon).
BAMBOO Project-Team (section vide)
7.3. Popularization

- Guillaume Beslon published an interview on modeling in "la revue du progres".
9.3. Popularization

- Olivier Grandrillon : Participation in the café des sciences "La recherche en génétique, entre prouesses et promesses", in Lyon (Samedi 11 octobre)
- Samuel Bernard : Participation in Conférence à l’Université Ouverte “Garder le rythme, c’est garder la santé” and “L’âge de nos cellules par test nucléaire”, in Lyon.
- Thomas Lepoutre : Cycle "Mathématiques et médecine" de l’Université Ouverte.
- Thomas Lepoutre is one of the organizer of Mathalyon (Mathematical exhibitions in highschool with 4 researchers, 20 days of intervention every year).
- Thomas Lepoutre : Intervention at Cité Scolaire Internationale (Highschool in Lyon) to explain what is a researcher’s job.
IBIS Project-Team (section vide)
KALIFFE Project-Team (section vide)
MOISE Project-Team

9.3. Popularization

- Since 2010, Ch. Kazantsev is the Director of the IREM of Grenoble http://www-irem.ujf-grenoble.fr/irem/accueil/. The Institute is under rapid development now, joining about 30 teachers of secondary schools of the Grenoble region and 15 university professors. They work together 16 times a year on the development of the teaching strategy for the educational community. In addition to this, IREM is the editor of two journals: "Grand N" destined to primary schools teachers and "Petit x" – to the secondary schools. As a director and as an animator of IREM, Ch. Kazantsev has participated at
  - the week of Mathematics, the 17 and 21 March 2014,
  - the festival "Remue-Méninges", Echirolles, 22-25 April 2014,
  - the internship MATHC2+ in June and in October 2014,
  - the "Journées Nationales de l’APMEP": presentation of two workshops with M. Gandit "Sky: between historical and simulated data",
  - the "Fête de la science" with workshops "28 nuances de sciences" and "Récréation mathématique pour tous".

- M. Nodet gave talks and made posters to explain how the "problem-based learning" (a special case of "active learning") approach was introduced in mathematics for Grenoble university undergraduates, see e.g. [75] and [61].

- M. Nodet (in collaboration with A. Rousseau and S. Minjeaud) wrote a chapter of an outreach book "Brèves de maths" [59].

- M. Nodet gave outreach talks about "mathematics for environmental modelling" in various occasions: for the Grenoble maths Olympiades awards, twice for the “Science Fair 2014” (one for undergraduate students, one for secondary school pupils), for a daily visit of highschool students at Valence university.

- M. Nodet supervises a maths club "Math en Jeans" for secondary school pupils at two schools around Grenoble, which consists in proposing open research subjects to the students and supervising them over the year, in collaboration with the teachers.

- E. Blayo gave several outreach talks, in particular for the inauguration of the Fédération Rhône-Alpes-Auvergne de Mathématiques (Lyon, February 28), for the ceremony of the Christian Le Provost prize of the French Academy of Science (Saint Brieuc, April 18), and for MathC2+ internships.
8.3. Popularization

V. Calvez is responsible of "Math à Lyon", a serie of conferences in high school.

E. Grenier gave a public conference in Nancy in november 2014 on "mathematics and drugs".


P. Vigneaux is a member of the board of "Images des Maths", a pedagogic website.
STEEP Team  (section vide)
9.3. Popularization

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

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

Laurent Lefevre has been interviewed by Atlantico Web News Magazine on "Gadget ou véritable promesse ? Comment Amazon compte se chauffer grâce à l’énergie dégagée par les datas centers", September 21, 2014.
CTRL-A Exploratory Action (section vide)
DANTE Team

9.3. Popularization

- Interview of E. Fleury for X:ENIUS on arte TV: Big data : opportunity or curse ? (http://www.arte.tv/guide/fr/051094-020/x-ennis)
- Interview of M. Karsai for Campus Channel TV: Master 2 program of Complex Networks (https://www.youtube.com/watch?v=k7I1m1NCbTU)
9.3. Popularization

- fête de la science: atelier sciences manuelles du numérique.
- Interventions dans des classes de seconde sur la simulation simcity.
- participation à l’IREM de Grenoble, groupe algorithmique.
MOAIS Project-Team (section vide)
ROMA Team (section vide)
SOCRATE Project-Team (section vide)
TYREX Project-Team

8.3. Popularization

M. Razafimahazo developed a mobile application for the pupils of the école de la paix, Grenoble. The application uses Augmented Reality for cultural heritage tour of Grenoble City with content produced by pupils.

M. Razafimahazo Animated a brainstorming during CitizenTIC around OpenStreetMap crowdsourcing: “Les cartes changent la donne autour des parcours accessibles dans l’agglomération grenobloise”.

N. Layaïda animated several workshops on Open Linked Data for Grenoble City and Grenoble Agglomeration (La métro).

We received two pupils from secondary school, Jeremy Andreoletti and Hugo Kersaudy, for a one week initiation to research. We hosted several pupils from the primary school for a one day for a presentation and demos.

8.3.1. Institutional commitment:

C. Roisin Board member of the University Pierre Mendes-France, University of Grenoble, in charge of IT systems and TICE.

C. Roisin is President of the disciplinary commission of the University Pierre Mendes-France, University of Grenoble.

N. Layaïda is member of the Scientific Board of Advanced Data-mining of the Parsyval Labex.

N. Layaïda is member of the experts pool (selection committee) of the minalogic competitive cluster.
URBANET Team

9.3. Popularization

- Hervé Rivano gave a popularization talk for ISN teachers on smart cities and wireless networking issues in June 2014.
- Razvan Stanica gave an invited talk, titled *Data Collection and Analysis using Mobile Phone Sensors*, in the wireless sensor network training organized for industrial partners at the Ecole Polytechnique de Yaoundé in June 2014.
E-MOTION Project-Team (section vide)
EXMO Project-Team

8.3. Popularization

- Jérôme Euzenat gave a talk to the Canopé network conference cycle on “Communication et adaptation: la fabrique de la communication flexible (communication and adaptation: the making of flexible communication), CROP, Grenoble (FR), 2/04/2014.

- Jérôme Euzenat gave a talk to the 7es journées de l’interopérabilité des applications d’entreprise (JIAE) on “Aligner les ontologies pour communiquer (matching ontologies to communicate)”, Saint-Étienne (FR), 16/05/2014.

IMAGINE Project-Team

9.3. Popularization

Damien Rohmer published an article on volume preserving deformation in Quadrature Journal [41]. This journal is accessible for University students and teachers.
LEAR Project-Team

9.5. Popularization


- Together with other students in LJK, Mattis Paulin did an interview of Emmanuel Candès for his award of the Prix Jean Kuntzmann in June 2014. The interview will soon be published in Journal du CNRS.
MAVERICK Project-Team

7.3. Popularization

Every year, “MobiNet” (see section 4.5) classes are conducted with high school pupils of the large Grenoble area to practice initiation and intuition on Computer Science, Maths and Physics. Depending on the year, we have 2 to 4 groups in the scope of INP-Grenoble “Engineering weeks”, and 0 to 2 groups in the scope of Math-C2+ operations.
9.3. Popularization

- Franck Hétroy-Wheeler gave a talk to high school math teachers entitled: “Digital geometry: from real to virtual worlds”. This talk has then been adapted and given to a 11th grade class.
PERCEPTION Project-Team (section vide)
PRIMA Project-Team

8.3. Popularization

- James Crowley participated in the Radio emission Science Publique presented by Michel Alberganti on Radio France Culture on Friday 21 February from 14h00 to 15h00. Theme of the program: “Should we fear intelligent robots?”
- Patrick Reignier was interviewed by a journalist of Science et Vie for a paper on Artificial Intelligence