



RESEARCH CENTER
Grenoble - Rhône-Alpes

FIELD

Activity Report 2013

Section Popularization

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ARIC Project-Team

9.4. Popularization

- Nathalie Revol gave talks for pupils at collèges and lycées, as an incentive to choose scientific careers: lycée Jeanne d’Arc (Cessy, Ain), lycée Rosa Parks (Neuville, Rhône). During the “Week of mathematics”, she gave a 2-hour talk at lycée de la Plaine de l’Ain (Ambérieu-en-Bugey, Ain). She was present, took part in speed-meetings, and gave talks for the “Mondial des Métiers” (Eurexpo Lyon, Chassieu, Rhône) and for “Science au Carré(e)” (Forum des Halles, Paris). For the Science Fair, she gave 8 talks at ENS de Lyon. She was invited to “Interacadémiques” in Lyon, for an audience of inspecteurs d’académie. She supervised the internship of Quentin Chopinet (1e S, one week) and hosted Elsa Courtais (spé TSI, one day).
- Damien Stehlé was interviewed for an article in *La Recherche*, published in September 2013.

COMPSYS Project-Team (section vide)

CONVECS Project-Team

9.3. Popularization

H. Garavel participated to the committee in charge of organizing the Aerospace Valley series of industrial conferences on formal methods. The second conference^{0 0}, devoted to static analysis, held on June 28, 2013 in Toulouse and retransmitted by video-conference in Grenoble, attracted 95 participants from industry and academia.

R. Mateescu was in charge of the scientific organization of the In'Tech seminar entitled "*Formal Validation of Industrial Critical Systems*" held on April 18, 2013 at the Inria Grenoble – Rhône-Alpes research center in Montbonnot. The seminar attracted about 100 participants from academia and industry. F. Lang gave a public demonstration of the CADP tools and R. Mateescu gave a talk entitled "*Formal Modeling and Verification of Concurrent Systems using CADP*".

⁰<http://www.inria.fr/centre/grenoble/agenda/forum-methodes-formelles>

⁰<http://www.inria.fr/centre/grenoble/actualites/fiabilite-des-logiciels-pas-uniquement-pour-les-avions>

DICE Team

9.3. Popularization

Intervention in other arenas:

- Co-organization of the CARA community, that gather IT professionals around agility design. Meetings occurs once per month from 7PM to 10PM and gather around 50 people to discuss and debate. The complete animation scheme is available at <http://lyon.clubagilerhonealpes.org/>
- La révolution numérique, L'enseignement philosophique et les sciences: nouvelles perspectives, Fondation Simone et Cino del Duca, Paris, 13 novembre 2013
- Panel: Open Data and Civic Participation, Can "Open Data" Improve Democratic Governance?, CITRIS Data & Democracy Initiative and Institute of Governmental Studies, Berkeley, 12 September 2013.
- Big Data: Where Does Europe Stand? a Citizen's Controversy, at the Madariaga – College of Europe Foundation, with Roberto Viola, Deputy Director of DG Communication, Brussels, 12 July 2013.
- La Révolution numérique, un enjeu politique, Conférence au Cercle Pierre Mendes France de Lyon, 25 juin 2013
- Les données, nouveau moteur de l'économie, Congrès France Génétique Elevage, janvier 2013

Intervention in political instances. The Dice team aims at interacting with political representatives at the French Assemblée nationale, the Sénat, as well as instances of the European Union.

- Global perspective on the information society, Invited speaker at the Council of the European Union, Part I Europe at the periphery of the information society? Brussels, April 17, 2013, Part II Information society in China, the Beijing consensus? Brussels, May 14, 2013,
- La dépendance de la France en matière de données et services numériques, Assemblée Nationale, Audition publique du 21 février 2013, "Le risque numérique : en prendre conscience pour mieux le maîtriser ?",

PRIVATICS Team

8.3. Popularization

Claude Castelluccia and Daniel Le Métayer, La vie privée, un obstacle à l'économie numérique ?, LeMonde.fr, 03.09.2013, http://www.lemonde.fr/economie/article/2013/08/25/la-vie-privee-un-obstacle-a-l-economie-numerique_3466139_3234.html.

Mathieu Cunche, Smartphone, Wi-Fi et vie privée : comment votre smartphone peut se révéler être votre pire ennemi [35], October 2013, MISCMAG.

Mathieu Cunche, Quand les terminaux mobiles jouent les mouchards de poche, Podcast Interstices, September 2013, https://interstices.info/jcms/ni_74624/quand-les-terminaux-mobiles-jouent-les-mouchards-de-poche.

Cédric Lauradoux and Levent Demir, Guesswork [40], October 2013, MISCMAG.

Mobilitics project, Paris Metro Tracks and Trackers: Why is the RATP App leaking my private data?

Mobilitics project, Voyage au cœur des smartphones et des applications mobiles avec la CNIL et Inria, 09/04/2013, bit.ly/M3cWCi.

SPADES Team (section vide)

BIPOP Project-Team (section vide)

MISTIS Project-Team (section vide)

NANO-D Team

7.3. Popularization

NANO-D presented SAMSON to high school students during the 2103 “Fete de la Science” (Science Fair). The students were using SAMSON to interactively simulate chemical reactions, interact with models of nanotubes, build molecules, etc.

NECS Project-Team

9.3. Popularization

Carlos Canudas has given a plenary talk on ‘Forecasting and control of traffic systems: a network perspective’ at the International Workshop on Smart City, organized by IEEE Control Systems Society in Hangzhou, China, in August 2013, <http://smartcity.hdu.edu.cn>

OPALE Project-Team

9.3. Popularization

Jean-Antoine Désidéri gave the lecture “*Modelling and simulating, when engineering becomes numerical*” to the Valbonne International High School (CIV) on October 11, 2013.

Paola Goatin was interviewed twice :

- TV interview on evening news, France 3 Côte d’Azur, January 30, 2013 <http://www.youtube.com/watch?v=VIW4VgoTjEI&feature=youtu.be>.
- Journal interview : “*Une chercheuse au chevet des embouteillages*”, Nice Matin, January 2013 <http://www-sop.inria.fr/members/Paola.Goatin/NiceMatin.pdf>.

BAMBOO Project-Team (section vide)

BEAGLE Project-Team

8.3. Popularization

- E. Tannier participated to large audience conferences at the Université Populaire de Lyon in February 2013, giving three lectures on scientific revolutions.
- E. Tannier is a co-author of an article to the large audience journal “Pour la science” [32].

DRACULA Project-Team (section vide)

IBIS Project-Team (section vide)

MOISE Project-Team

9.3. Popularization

- E. Blayo gave several conferences for highschool students on the topics of applied mathematics and applied mathematics for environment.
- A. Rousseau is the Grenoble Rhône-Alpes scientific correspondent for outreach
- A. Rousseau and M. Nodet wrote an outreach article in the APMEP journal about mathematical modelling for the environment [59].
- A. Rousseau, M. Nodet and S. Minjeaud (Nice) developed an impressive outreach effort on the subject of ocean circulation, called "Bottles and Oceanography". They first wrote a paper and designed a numerical experiment, then they proposed a physical experiment as well. This whole package has been presented at UNESCO for the launch of Maths for Planet Earth 2013 <http://mpe2013.org/mpe-day-at-unesco>, and is a part of the IMAGINARY platform for outreach <http://imaginary.org/films/flaschen-und-ozeanographie>. It has also been presented at the Comité International des Jeux mathématiques [57], and has been published in the journal Textes et Documents pour la Classe (resources for highschool teachers) [56].
- A. Rousseau and M. Nodet are members of the editorial committee of Maths for Planet Earth "Un jour une brève » operation <http://mpt2013.fr>, which aimed and succeeded to publish every day a short outreach article in 2013. Moreover, A. Rousseau is also webmaster and member of the executive board (6 people) of the operation.
- A. Rousseau and M. Nodet gave conferences during the Science Fair / Fete de la Science, for high-school students and their teachers, on the topics of mathematical modelling for the environment.
- M. Nodet gave a talk at the JELU workshop, which regroups university teachers and highschool teachers on teaching methods.
- M. Nodet wrote and outreach article about glaciology in the journal of the French society for applied mathematics SMAI, in the special issue MATAPLI number 100 on the occasion of Mathematics for Planet Earth 2013.
- M. Nodet gave a conference at the Mathematics Weeks in Valence for highschool students and their teachers, on the topic of mathematics for the environment and meteorology.
- Ch. Kazantsev begins a collaboration with Morocco, she has presented the IREM and IREM activities to the Ecole Normale de Rabat who wants now to create such an Institute.
- In the context of the program "100 parrains-100 classes", Ch. Kazantsev gives a weekly lectures to pupils of one secondary school in Grenoble.
- Ch.Kazantsev has participated in the "Fête de sciences" and in the "Semaine des maths" presenting the activities of the IREM of Grenoble.
- F. Zertuche and J. Calandreau have participated in the "Fête de sciences" presenting the activities of Moise.

NUMED Project-Team

7.3. Popularization

- Vincent Calvez is responsible for regular actions towards high school students (regular talks in high schools).
- Paul Vigneaux:

Paul Vigneaux has a significant activity in the official dissemination website of CNRS: “Images des Mathématiques”. He is a member of its Editorial Board since the beginning in 2009, in particular responsible of the “Billets” section (60% of the total reading flux of the website). Nonetheless, he also edited most of the applied mathematics articles of the site and made several articles contributions. Among others a translated/commented article on Richard Courant and his Institute, as well as a series, with the authorization of the EMS, of 20 articles on “Success Stories of Mathematics in Industry” in 2012-2013. Cf: <http://images.math.cnrs.fr/Vigneaux-Paul.html> In 2013, he was one of the editors of the series of 40 books published by the association of *Le Monde* (top national newspaper), *Institut Henri Poincaré* (Head: Cedric Villani) and *Images des mathematiques*. This series was supported by Cedric Villani and aims at broadcasting mathematics to a general public. Vincent Calvez was also one of the editors of the series. Currently still under publication, it is already an editorial success in terms of selling (20 book issued).

STEPP Team

9.3. Popularization

STEPP participated in the 2013 edition of the technological fair “Forum 4i” of the Rhône-Alps region, which was on “Intelligent mobility, usages and innovations”. The forum is visited by local and regional politicians and other stakeholders as well as by the general public. We presented the activities of the team and the socio-economic issues that motivate them.

Emmanuel Prados has been invited to give the introductory talk of the conference “Journée des Mathématiques” of Grenoble organized by the “Rectorat de Grenoble” (Grenoble, March 18, 2013; Title of the presentation: “Préserver l’environnement avec l’aide des mathématiques”).

AVALON Team

8.3. Popularization

- Laurent Lefèvre
 - Interview extract in Blog "Web developpement durable" : Internet & Data Center : bilan énergétique positif ou négatif , July 17, 2013
 - Interview for La Vie Journal, "Using Internet with less energy", June 13, 2013
 - Interview for Liberation News Paper, "Datacenters : la donnée écolo", April 15, 2013
 - Participant in the Panel on Green Computing, GDR GPL, Nancy, April 2013
 - Co-Editor for the Future Internet Assembly (FIA) Book 2013 : Validated Results and New Horizons, Alex Galis editor, LNCS, Volume 7858, Springer, May 2013
- Jean-Patrick Gelas :
 - Invited speaker to Ecocity 2013, "Greening Clouds and High Performance Computing: Challenges and Initiatives", Nantes, France, September 23, 2013
 - Invited speaker to JDN2013 (Journée sur le décisionnel dans le Nuage), "Energy monitoring framework for high-performance cloud infrastructure", Bron, France, May 16, 2013
 - Invited speaker to JSF2013 (Journée Scientifique) about Energy, "Propositions to improve Data Centers and Clouds Energy Efficiency", Lyon, France, June 26, 2013

DANTE Team (section vide)

MESCAL Project-Team

9.3. Popularization

9.3.1. Popular Science

- MESCAL actively promotes science to young and non-scientific audience. This year Corinne Touati participated the *Fête de la science* and animated a workshop on game theory. theory [48].
- Jean-Marc Vincent contributed to the national initiative for introducing computer science to high school professors in mathematics. He was responsible of the high school professors training, of the corresponding university diploma and of the online training provided by the rectorat. Jean-Marc also participated to the steering committee of CERVIN (<http://flet.fr/cervin/>) for Inria.
- Olivier Richard is involved in training *Classe Préparatoires* professors to Python. He is also responsible of the Polytech fablab, which he presented at the Toulouse Hacker Space Factory.

MOAIS Project-Team (section vide)

ROMA Team (section vide)

SOCRATE Project-Team (section vide)

URBANET Team

9.3. Popularization

- Khaled Boussetta gave a keynote talk entitled "Cloud gaming: state of the art and open challenges", organized by the International Cloud Computing School (ICCS 2013), Hammamet Tunisia, in Dec 2013.
- Fabrice Valois gave an 8h course on ISN (Informatique et Sciences du Numérique). These lectures are made for the Rectorat of Lyon, the public is high school teachers.
- Trista Lin participated to *Fête de la science 2013*, between Oct 8-11. She was responsible for the animation "Best Route - Intelligent Mobility", at La Mache Highschool.
- Hervé Rivano gave a keynote talk entitled "Column Generation for optimization of wireless mesh networks", in the Optimization days of University of Paris XIII.

E-MOTION Project-Team (section vide)

EXMO Project-Team

8.3. Popularization

- Jérôme Euzenat gave a presentation on *Les données liées ouvertes (linked open data): publier des données réutilisables* at the open data days of the FREMIT Federation, IMT/IRIT, Toulouse (FR), 5/11/2013.
- Jérôme Euzenat coordinated the CNRS development days (JDEV) sessions on *web programming*, 4 presentations, 6 tutorials, 5 workshops, 80 participants, Palaiseau, 4-6/9/2013.

IMAGINE Project-Team (section vide)

LEAR Project-Team

9.4. Popularization

- C. Schmid presented the research area of visual recognition to a group of high-school teachers, Inria Grenoble, March 2013.
- A. Gaidon, Z. Harchaoui and C. Schmid published an article about activity recognition in videos in ERCIM-news 95 (October 2013).

MAVERICK Project-Team (section vide)

MORPHEO Team (section vide)

PERCEPTION Team (section vide)

Prima Project-Team

8.4. Popularization

- Thierry Fraichard gave three lectures on Robotics to highschool students and teachers in the scope of the “Informatique au lycée” initiative, April and May 2013.
- Dominique Vaufreydaz gave two lectures on perception and companion robot to highschool students and teachers in the scope of the “Informatique au lycée” initiative, April and May 2013.
- Dominique Vaufreydaz gave seminars entitled “Perception, reconnaissance d’activités et robots compagnons.”, Fêtes de la Science, at Inria Grenoble, Monbonnot, October 2013.
- The first version of the AppsGate integration platform was demonstrated to the public as part of the Experimenta Fair⁰ in Grenoble, from 10 to 13 of October 2013.

⁰<http://www.echosciences-grenoble.fr/sites/experimenta>

TYREX Team

8.3. Popularization

J. Lemordant has participated in several events to popularize recent results in the areas of accessible pedestrian navigation, namely conferences at the Osaka City University.

J. Lemordant has participated in several events to popularize recent results in the areas of pedestrian navigation and mixed reality, namely the 6th European eAccessibility Forum and the State Of The Map 2013 conference.

P. Genevès has contributed to the creation of a video for disseminating the obtained research results. This video was displayed during the ceremony when he received the CNRS Bronze Medal. Intended for a very wide audience, it presents the societal challenges addressed, introduces the obtained research results and their applications.

J. Lemordant, T. Michel and M. Razafimahazo showcased indoor and outdoor navigation to Indian journalists (Education Times, Economic Times, Hindustan Times, The Hindu, NDTV) and have been interviewed by Monideepa Banerjee (NDTV). Grenoble, October 2013.

J. Lemordant, T. Michel and M. Razafimahazo have participated to [Experimenta 2013](#) to present their results on the 3D audio integrated in the first year VENTURI demonstrator. Grenoble, October 2013.

M. Razafimahazo has participated to [Museomix](#) and developed in 12 hours an iOS application called [Museomix#Gre](#) based on TYREX technologies for the Dauphinois Museum. It consists of an interactive map of the museum and visitors were able to understand the concept of virtual reality by being immersed in 5 different panoramas taken during the event. Grenoble, November 2013.