



RESEARCH CENTER

FIELD

Activity Report 2013

# Section Popularization

Edition: 2015-04-10



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**ABS Project-Team (section vide)**

## **ABSTRACTION Project-Team**

### **9.3. Popularization**

Xavier Rival gave an interview about the verification of safety critical embedded softwares to the “Inriality” online magazine, in July 2013.

**ACES Project-Team (section vide)**

## **ADAM Project-Team**

### **9.3. Popularization**

Christophe Ribeiro gave several demonstrations of the APISENSE platform (see Section 5.1 ), especially for the Recherche, Innovation, Creation (RIC) day that was held on 1 October 2013 in Lille and that targets graduate students from the M.Sc and Computer Engineering programs. He also participated to the Forum des PME innovantes organized the PICOM competitiveness cluster on 16 October 2013. The APISENSE platform has been the subject of some popularization articles in ERCIM News [24] and L'Usine Nouvelle [51].

The PowerAPI library (see Section 5.3 ) has been the subject of some popularization articles in ERCIM News [23], GreenIT.fr [49] and 01 Business & Technologies [50].

**ALEA Project-Team (section vide)**

## **ALF Project-Team**

### **9.3. Popularization**

- Erven Rohou gave a talk at the SFGP (Société Française du Génie des Procédés): “Stratégies d’augmentation des performances de calcul des logiciels”
- Isabelle Puaut and Erven Rohou gave a lecture at Lycée Descartes: “Les mathématiques au service de la performance des ordinateurs”.

## **ALGORILLE Project-Team**

### **8.3. Popularization**

Jens Gustedt is regularly blogging about efficient programming in particular the [C programming language](#). He also is an active member of the [stackoverflow community](#) a technical Q&A site for programming and related subjects.

L. Nussbaum currently serves as the (elected) Debian Project Leader since April 2013.

M. Quinson develops a pedagogic platform in collaboration with G. 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](#).

M. Quinson is co-leading a working group on the teaching of computer science in the LORIA laboratory. He served both as a program chair and a local chair for a nation-wide two-days workshop gathering about hundred people involved in the introduction of computer science in the French secondary education: university lecturers in charge of teaching to the prospective CS teachers, regional heads of the Education minister accompanying this reform and producer of teaching resources. He also served both as a program chair and local chair for a regional gathering of CS teachers of the secondary wanting to exchange their good practices. This initiative, initiated in Nancy, will spread in several other French cities in 2014.

M. Quinson participated to several events toward the popularization of computer science (either as a speaker or as a co-organizer), targeting either kids and pupils (Telecom Nancy in November), students (Inria in March), maths teachers (APMEP Lorraine in March), CS teachers (SIF-ISN day in June), or all public (Fête de la science in November).

M. Quinson serves on the editorial board of the Interstices website of Inria for the popularization of computer science.

## **ALICE Project-Team**

### **7.3. Popularization**

Sylvain Lefebvre is a member of the *commission de médiation scientifique* and of the *comité espace transfert*.



## **ALPAGE Project-Team**

### **9.3. Popularization**

- Benoît Sagot has given in December 2013 a tutorial about the MElt POS-tagger for approx. 20 linguists, as part of the activities of the Corpus Écrits consortium, which belongs to the TGIR Hum-Num.
- General NLP presentation at the ISN day (for Math teachers, computer science option, December 4th)
- Interventions at Digilinguo (organized by DGLFLF) on April 15th and June 5th, in particular for the promotion of Mgwiki
- Intervention at the Inria I-Match day, organized during the "Futur en Seine" event (June 14th)

## **ALPINES Team**

### **9.3. Popularization**

Xavier Claeys dedicated an afternoon to participation to the "fête de la science".

## AMIB Project-Team

### 7.3. Popularization

- Outreach seminar at *Lycée Blaise Pascal* (Orsay, France) – Yann Ponty – Popular science seminar (2h), jointly organised by INRIA (Saclay) and Académie de Versailles.
- Unite ou café, Inria Saclay Popularization seminar, *Les briques de construction de la vie*, see: <https://intranet.saclay.inria.fr/vie-du-centre/unithe-cafe/rencontres-2013/briques-construction-vie>.

We also had the opportunity to be part of a few valorization related events. RNA structural studies were presented at the Rencontres Inria Industrie - Modélisation, simulation et calcul intensif in June 2013 <http://www.inria.fr/centre/saclay/innovation/rii-modelisation-simulation-calcul-intensif/presentation>. This led to an invitation at Sanofi Pharmacometry and Bioinformatics day in December 2013.

## **ANGE Team**

### **9.3. Popularization**

**08/01/13** J. Sainte-Marie together with O. Bernard (Inria BIOCORE) and B. Sialve (Naskeo) published a short article named “Un zeste de mathématiques pour les biocarburants de demain” on the french Mathematics for Planet Earth website.

**30/05-02/06/13** N. Seguin participated to the “Salon de la culture et des jeux mathématiques” at the UPMC stand. This forum aims at explaining the job of researcher in Mathematics to pupils and high school students.

**10-11/10/13** E. Audusse gave a talk for high school students at “Savante Banlieue”.

**10-12/10/13** E. Audusse, E. Godlewski, R. Hamouda, Y. Penel and J. Sainte-Marie run the Inria stand at the 2013 edition of the “Fête de la Science”. They presented animations of past tsunamis to a general public.

**2013** E. Audusse intervened in a secondary school (Pontault Combault) for “Maths en Jeans”.

**2013–2014** E. Audusse, R. Hamouda and J. Sainte-Marie implemented a software (“Tsunamath”) for simulating tsunamis in the context of a worldwide exhibition for Mathematics of Planet Earth. The first stage will be held in Berlin in March 2014.

## **AOSTE Project-Team**

### **9.3. Popularization**

We held a thematic Spring School in late April in Shanghai, based on the topics of the DAESD associated-team 8.4.1.1 . It was open to students from all over China, and we invited also chinese speakers (but the attendance of around sixty students was mostly from several universities in and around Shanghai).

## **APICS Project-Team**

### **9.3. Popularization**

- J. Leblond is a member of the Committee MASTIC. She gave a communication within the “Café-in” of the Research Center (Sept.).
- M. Olivi is co-president with I. Castellani of the Committee MASTIC (Commission d’Animation et de Médiation Scientifique) <https://project.inria.fr/mastic/>. She is responsible for Scientific Mediation. She held a booth at the APMEP conference 2013 in Marseille (France).
- E. Pozzi was a member of the Committee MASTIC.
- S. Chevillard published a popularization blog post on the website “Mathématiques de la planète Terre 2013” (<http://mpt2013.fr/>) about the problem of inverse magnetization of rocks (cf. Section 4.3 )

## **ARAMIS Team**

### **9.3. Popularization**

The team is involved in the BrainCatalogue project (coordinator: Roberto Toro, Institut Pasteur) dedicated to the popularization of neuroanatomical knowledge. The project features MRI scans and 3D reconstructions for various vertebrates species (bear, mouse, macaque, dolphin, leopard, rhinoceros, human, squirrel ...).

The team has participated to the ICM "Donor days".

## 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.



## **ARLES Project-Team**

### **8.3. Popularization**

- Benjamin Billet was invited to speak at a one-day Android tutorial event organized by the ARAMIS business network at Lyon.
- Animesh Pathak attended the "India-France Technology Summit" in New Delhi, India as part of the Inria delegation, where he was part of a panel on urban rail, and also presented a technology showcase of "TravelDashboard: Smart Mobility for Urban Travelers".
- Animesh Pathak was invited to be part of a panel on the "Chronique marché des applications mobiles" television programme on the French TV channel TVFIL78.
- Emil Andriescu, Sara Hachem, Kim Hwa Khoo, Georgos Mathioudakis Animesh Pathak, and George Rosca represented Inria at the "Futur en Seine" technology expo in Paris.

**ASAP Project-Team (section vide)**

**ASCLEPIOS Project-Team (section vide)**

**ASCOLA Project-Team (section vide)**

**ASPI Project-Team (section vide)**

## ATEAMS Project-Team

### 7.3. Popularization

- Jan van Eijck : “Why Learn Haskell?”, Talk for UvA Programming Summer School, Amsterdam, July 2, 2013.
- Paul Klint, Davy Landman: “Hoe ontstond de eerste computer?” (“The origin of the first computer”), Public lecture for broad audience, NEMO, Amsterdam.
- Paul Klint, “How to test a meta-program?”, invited talk at the Workshop on Scalable Language Specification (SLS 2013).
- Paul Klint, “BaMa: Key to the Future?”, invited talk at IW1010: 10 Years of UvA Information Sciences, Amsterdam
- Paul Klint, “Understanding the Quality of Open Source Projects”, invited talk at SATToSe, Bern
- Davy Landman : “What Does Control Flow Really Look Like? Eyeballing the Cyclomatic Complexity Metric”, poster and presentation at ICT.OPEN (NWO networking event).
- Michael Steindorfer : “Object Redundancy Profiling in Java”, poster and presentation at ICT.OPEN (NWO networking event).
- Tijs van der Storm : “Domain-specific languages”, Guest lecture Bachelor Computer Science, Universiteit van Amsterdam
- Tijs van der Storm : “Opportunities and Risks of MDD – The case of Derric: a DSL for digital forensics”, Presentation at CodeGeneration 2013.
- Tijs van der Storm : “Implementing Domain-specific languages using Rascal”, Invited Presentation at Sioux: Source of your technology.
- Tijs van der Storm, Kevin van der Vlist, Jimi van der Woning : “Questionnaires in Rascal”, participation Language Workbench Challenge 2013 (LWC’13).
- Tijs van der Storm, Alex Loh, “Questionnaires in Ensō”, participation Language Workbench Challenge 2013 (LWC’13).
- Tijs van der Storm : “QL: a language for questionnaires”, assignment description LWC’13.
- Tijs van der Storm : “Software Development Automation Research: Collaboration with Industry”, presentation at the 1st Dutch conference on Software Development Automation (SDA’13).
- Jurgen Vinju : “Modularity”, Guest lecture Bachelor Computer Science, Universiteit van Amsterdam
- Jurgen Vinju : “Software Analysis and Transformation with Rascal” , Presentation NBIC BioAssist meeting (BioAssist)
- Jurgen Vinju, Tijs van der Storm, Atze van der Ploeg, Anastasia Izmaylova, Ali Afroozeh : CWI Open Day, demonstration of NAO robot programming to children using dedicated DSL “Marvol”.
- Jurgen Vinju, Tijs van der Storm, Atze van der Ploeg : “CWI In Bedrijf” (CWI and Industry) , demonstration of Rascal language workbench using the NAO robot DSL “Marvol”.
- Vadim Zaytsev : “A Snappy Introduction to Metaprogramming in Rascal”, RedDevCon’13.
- Vadim Zaytsev : “Modeling Software Structures with GrammarLab”, Tutorial at MoDELS’13.

**ATHENA Project-Team (section vide)**

## ATLANMOD Project-Team

### 9.3. Popularization

In June 2013, the team participated to the organization of the seminar “Logiciels de qualité : modélisation et vérification” at “Journées scientifiques de l’Université de Nantes”. The seminar had more than 50 participants, from industry and academia.

Moreover, since several years, the AtlandMod team is already very involved in the open source community, notably via its constant activity within the context of the Eclipse Foundation. This activity actually takes different forms: creation and leading/development of Eclipse projects (under *Eclipse.org* or *Eclipse Labs*), participation to the major worldwide community events (i.e.; EclipseCon North America and EclipseCon Europe), organization of events targeting the local community (i.e. Eclipse DemoCamps), etc.

This year again, the team has been active and visible in terms of concrete contributions to the community. The main remarkable items are the following ones:

- Leading of the MDT MoDisco project (Hugo Bruneliere), the Eclipse reference project concerning model-driven reverse engineering;
- Commitment to other projects directly under *Eclipse.org*: MMT ATL and EMFT EMF Facet (Hugo Bruneliere);
- Commitment to other projects under *EclipseLabs*: EMFToCSP (Jordi Cabot, Carlos Gonzalez) and Virtual EMF (Caue Clasen, Jordi Cabot);
- Creation and development of a new incubation project under *Eclipse Labs*: Collaboro (Javier Canovas);
- Organization of an official Eclipse DemoCamp in Nantes, on the 28th of June 2012, for locally promoting the Eclipse Juno release including the MoDisco, ATL and EMF Facet team’s projects (Hugo Bruneliere, in collaboration with the Obeo company);
- Publication of a paper on MoDisco in the European ERCIM NEWS Journal 88, dedicated to Software Evolution (Hugo Bruneliere and Jordi Cabot, in collaboration with the Mia-Software company);
- Presentation of talks during the two main Eclipse events (Hugo Bruneliere): at EclipseCon North America 2012 about EMF Facet, at EclipseCon Europe 2012 about Collaboro.

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



## **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

## **AVIZ Project-Team**

### **9.3. Popularization**

Samuel Huron: 9.3. News Paper and press cover : 04/2013, "Zeitgeist Borders shows a world of Google searches", NewScientist, Hal Hodson 11/2013, "Les flux de données visualisés en temps réel", La Recherche, Samuel Huron, Romain Vuillemot, Jean Daniel Fekete

**AXIS Project-Team (section vide)**

## AYIN Team

### 9.3. Popularization

- Paula Craciun and Josiane Zerubia have published an article in ERCIM News'95 [19]. They have also written a blog article for MPT2013 in French [<http://mpt2013.fr/les-ports-vus-du-ciel/>] and MPE2013 in English [<http://mpe2013.org/2013/10/29/boat-extraction-in-harbors-from-high-resolution-satellite-images/>].
- Yuliya Tarabalka gave an interview to the LISA journal in January 2013 [<https://lisa.sophia.inria.fr/yuliya-tarabalka-888.html>]. She participated in the conference of the Young Academy of Science in Ukraine, presenting the Ayin team and her research work to the 12-16 year-old attendees of the Academy.
- Yuliya Tarabalka and Guillaume Charpiat (STARS EPI) published an article in the Earthzine journal "Exploiting Temporal Coherence for Fire Mapping from MODIS Spaceborne Observations" in September 2013 [20].
- Josiane Zerubia took part in a debate on the topic "Les TIC, une révolution pour les femmes?" organized at the SKEMA Business School in Sophia-Antipolis by three associations (Femmes & Sciences, Femmes 3000 and Telecom Valley) on November 26, 2013 (for more detail see <http://www.femmesetsciences.fr/actualites/les-tic-une-revolution-pour-les-femmes-conference-debat-261113-sophia-antipolis/>)

**BACCHUS Team (section vide)**

**BAMBOO Project-Team (section vide)**

## **BANG Project-Team**

### **8.3. Popularization**

- Jean Clairambault: (1) 1 h Forum des métiers UPMC, September; (2) 2 h Exposé “Animath” lycée St Laurent, Lagny, November
- Marie Doumic: movie on the ERC grants for "Horizon 2020", <http://www.horizon2020.gouv.fr/cid75865/video-lancement-horizon-2020-decembre-2013.html>

## **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].



**BIGS Project-Team (section vide)**

**BIOCORE Project-Team**

**BIPOP Project-Team (section vide)**

**BONSAI Project-Team (section vide)**

**CAD Team (section vide)**

## **CAGIRE Team**

### **8.3. Popularization**

One presentation in Unithé ou Café and presence to the "Inria-Industrie" days [VP]. Participation in the "Visage des Sciences 2013" [PB].

## **CAIRN Project-Team**

### **8.4. Popularization**

A popularisation paper on energy efficiency has been published in [80]

15 members of the team participated in the national science festival (Fête de la Science) in Plemeur-Bodou in October (demonstrations on wireless sensor networks, cryptology and digital integrated circuits).

A letter was published in Inria Emergences on "improving energy efficiency of embedded processors": [http://emergences.inria.fr/lettres2013/newsletter-n28/L28\\_GECOS](http://emergences.inria.fr/lettres2013/newsletter-n28/L28_GECOS)

## CALVI Project-Team

### 9.3. Popularization

C. Caldini-Queiros wrote the popularization paper "Les schémas numériques : les mathématiques au service de la physique", published in "Presses universitaires de Franche-Comté", rewarded with Prix A'Doc de la jeune recherche en Franche-Comté 2013.

E. Frénod wrote the following popularization papers

- Mon littoral, c'est de la dynamique. Brève pour : 2013 - Mathématiques pour la planète Terre - <http://mpt2013.fr/mon-littoral-cest-de-la-dynamique/>.
- Aquaculture en milieux confinés : le cas de l'étang de Thau. Brève pour : 2013 Mathématiques pour la planète Terre. - <http://mpt2013.fr/aquaculture-en-milieux-confines-le-cas-de-letang-de-thau/>.
- Un exemple d'application des mathématiques à l'environnement littoral : La dynamique à long terme des dunes marines dans les zones soumises à la marée. Modélisation, Analyse, Homogénéisation et Simulation. Matapli (Smai), No 100, pp 129–140.



## CAMUS Team

### 9.3. Popularization

- Cédric Bastoul participated to the *Rencontres Inria-Industrie* in June 2013
- Cédric Bastoul participated to *Fête de la Science* at University of Paris-Sud in October 2013

## CAMEL Project-Team

### 9.3. Popularization

- Jérémie Detrey gave a presentation on the Enigma machine and its cryptanalysis to high-school teachers as part as the “journée EPI-ISN”.
- Pierrick Gaudry gave a presentation at the “journée de l’Association francophone des spécialistes de l’investigation numérique”.
- Marion Videau:
  - gave a talk for the awards ceremony of the *Olympiades de maths* in Lorraine.
  - gave a practical session of cryptography and information security for students from *lycées* taking part in an immersion day at the faculty.
  - participated to events on information about university studies for pupils and students (Clés de la réussite, Portes ouvertes de la faculté des sciences, Oriaction).
- Paul Zimmermann takes part in the “Maths-en-Jeans” program, with about 20 students in “troisième” at the Collège Pierre Brossolette in Réhon.

## **CARMEN Team**

### **9.3. Popularization**

- S. Labarthe, Forum Emploi Maths 2013, invited for an intervention to the round table « Témoignages : métiers du secteur santé », 01/2013, Paris.
- S. Labarthe and G. Ravon welcomed two secondary school pupils for a week dedicated to the observation of research work in our team and the Inria research center.
- N. Zemzemi, recieved 4 groups of pupils in final year of high school, that were following a special option on computer, numerical sciences. He animated a workshop on modelling for health sciences.
- The team was represented by N. Zemzemi at the « Rencontre Inria-Industrie » (meeting Inria – Industry) on: Modelling, simulation, and high-performance computing, Paris, June 11th, 2013.
- A. Davidovic presented herself and her work during a meeting with the public called « Visages de sciences », organized at « Cap Sciences », Bordeaux, Spring 2013.

## CARTE Project-Team

### 9.3. Popularization

Isabelle Gnaedig is member of the scientific vulgarization committee of Inria Nancy Grand-Est. This committee is a choice and guidance instance helping the direction of the center and the person in charge of popularization events, to elaborate a strategy, to realize events and to help researchers to get involved in various actions aiming at popularizing our research themes, and more generally computer science and mathematics.

This year, in particular, the center participated to organization of mathematics competitions and projects for high school students, to conferences for computer science high school teachers, to the “Fête de la Science”, to the "Moments d'invention" exhibition of the “Nancy Renaissance” event, and received several high school classes in various research teams of Inria Nancy Grand-Est. Details can be found at <https://iww.inria.fr/NanSciNum/#.UsGBEWtuKY8>.

**CASCADE Project-Team (section vide)**

## **CASSIS Project-Team**

### **9.3. Popularization**

Invited conference of Véronique Cortier at the conference “Sciences et Société”, Nancy, January 17th, 2013.

“Vote par internet”, popularization science paper on e-voting. In Interstices, January 2013. Véronique Cortier and Steve Kremer.

Fête de la Science 2013: Science popularization action during one week on a workshop “a cryptographic treasure hunting”. Véronique Cortier, David Galindo, Stéphane Glondu, Steve Kremer, Éric Le Morvan, Cyrille Wiedling.

Video gaming month at the “Fabrikà Science”, University of Franche-Comté, December 2013. Popularization of computer science using the topic of video games. Frédéric Dadeau.

## CASTOR Team

### 9.1. Popularization

- With Maria Vittoria Salvetti of the University of Pisa, Hervé Guillard has written a popularization article "Des mathématiciens à la rescousse des lagunes méditerranéennes" [29] for the online journal Accromath.  
Accromath is a journal of the "Centre de recherches mathématiques de l'Université de Montréal" whose aim is to popularize Mathematics and their applications for secondary school pupils and their professors.
- Redaction of the short note "Les vagues et les rivages, une question de changement de variables" <http://mpt2013.fr/changement-de-variable-et-comment-les-vagues-montent-a-lassaut-des-rivages/> in the framework of Mathematics of Planet Earth 2013 (MPE2013) published 04/10/2013 (Hervé Guillard).
- Redaction of the short note "Retour vers le futur" <http://mpt2013.fr/retour-vers-le-futur/> in the framework of Mathematics of Planet Earth 2013 (MPE2013) published 16/10/2013 (Jacques Blum & Didier Auroux).

## **CELTIQUE Project-Team**

### **8.3. Popularization**

Frédéric Besson and Nataliia Bielova have presented their approach for quantifying web-fingerprinting in the "Du côté de la recherche" section of the November issue of Ouest Inria.

David Pichardie organised the third edition of the french Castor Informatique contest. This contest promotes Computer Science in secondary schools and high schools. It is organised by Inria, ENS Cachan and the France IOI association and supported by CNRS, Pascaline, the SIF and API associations. In 2013, there was about 170.000 participants.



**CEPAGE Project-Team (section vide)**

## **CIDRE Project-Team**

### **9.3. Popularization**

[17] represents an effort to communicate to the community of engineers and company officials the reflexions and evolutions taking place in academia in the domain of personal data protection, in the fields of both computer science and law. The adopted perspective is to shed some light on the evolutions of the requirements, procedures and policies applying to public or private organizations, putting them in correspondence with the evolution of technical and legal risks, societal motivations and computing tools.

## **CLASSIC Project-Team**

### **8.3. Popularization**

Gilles Stoltz

- wrote a blog post for MPT2013 and an article for The Huffigon Post, in the researchers' blog;
- gave a conference for high school teachers in Orléans;
- gave a mini-course on statistics to “classes préparatoires” professors at ENS Paris and a mini-course of game theory at ENS Rennes, targeted to inspectors of high-school-teachers.

## **CLIME Project-Team**

### **9.3. Popularization**

- Marc Bocquet made a presentation on employment in the environment sector at the second “Forum Maths Emploi”, January 2013, Paris.
- Marc Bocquet wrote a paper [32] on “Modélisation numérique de la dispersion atmosphérique accidentelle des radionucléides : l’état de l’art de la recherche” in the journal “Revue du Centre de Défense NBC”.
- Isabelle Herlin and Vivien Mallet wrote an introduction to air quality simulation [33] for a special issue on Mathematics for Planet Earth dedicated to teachers in french “collèges” and “lycées” and an internet contribution [35] “Votre air, votre santé”: <http://mpt2013.fr/votre-air-votre-sante/>
- Vivien Mallet introduced numerical simulation of air pollution at the 2013 edition of “Mathématiques en mouvement”.
- Vivien Mallet and Anne Tilloy took part to the festival “Futur en Seine” and presented, during four days, research advances in air quality simulation at urban scale.

## COATI Project-Team

### 9.4. Popularization

Attractiveness: J-C. Bermond is in charge of the attractiveness of the center Inria Sophia Antipolis Méditerranée. Among other activities he organized The "Mediterranean days" (January 23-25) (25 foreign students invited) and co-organized the valorization afternoon on February 2, 2013 (100 students);

Fête de la Science: F. Giroire presented the stand "Magie et jeux mathématiques" at the Centre International de Valbonne, France (October 8, 2013); F. Moataz assisted the stand "Drone/Unmanned Aerial Vehicle" at Sophia Antipolis, France (October 12-13, 2013);

Formation EDSTIC: J. Araújo has given lectures on Graph Theory and Algorithms to PhD students, 20h;

Mathématiques et Internet: J-C. Bermond gave a vulgarization talk at the Centre Culturel of La Grande Motte, Hérault France (April 16, 2013);

Optimisation dans les réseaux: J-C. Bermond gave 3 talks to investors on the future of optimization in networks, Paris (March 28, 2013);

Science culture au lycée, Inria/PACA: N. Nisse explains graph to a Lycée class at Marseille, France (December 19th, 2013);

## **COFFEE Project-Team**

### **8.3. Popularization**

- R. Masson: Talk “mathematics in geosciences” for the prize-giving of the Olympiads of Mathematics 2013 at UNS
- R. Masson: Article on the role of mathematics in petroleum engineering, in “L’énergie à découvert”, CNRS Editions, 2013.
- T. Goudon: “Modelling and simulation of spacecraft charging”, European Success Stories in Industrial Mathematics, Springer 2012.
- During the international program “2013, Mathematics of the Planet Earth”, supported by UNESCO, T. Goudon, with M. Andler, L. Bel, S. Benzoni, C. Imbert, A. Rousseau has animated the website [mpt2013.fr](http://mpt2013.fr) with a daily short notice describing a mathematical activity in connection to the Planet Earth. This operation will be followed by a book, to be edited in 2014.
- T. Goudon: “Mathématiques de la Planète Terre”, Textes et Documents pour la Classe (TDC), Scérén, CNDP-CRDP, 2013.
- T. Goudon, with C. Calgaro and E. Creusé “Modélisation et simulation des avalanches de neige”, Matapli n. 100, 2013.
- T. Goudon: Working session for teachers on “mathematics of the planet earth”, during the national meeting of the APMEP (national society of teachers in math), with F. Boyer, G. Chapuisat and J. Charrier from Marseille; this will be completed with talks in classes, with S. Krell.

**COMETE Project-Team (section vide)**

## **COMMANDS Project-Team**

### **8.3. Popularization**

Pierre Martinon presented an “Unithé ou Café” talk about optimal control on November 8th, entitled “Quand le mieux n’est pas l’ennemi du bien”.



**COMPSYS Project-Team (section vide)**

**CONTRAINTEs 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<sup>0 0</sup>, 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*".

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

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

## **COPRIN Project-Team**

### **9.3. Popularization**

- A short breve entitled “How Much for My Ton of CO2 ?” coauthored by Mireille Bossy (Inria TOSCA) , Nadia Maizi (CMA ENSMP) and Odile Pourtallier was published on the daily blog of MPE2013 (Mathematics for Planet Earth 2013). <http://mpe2013.org/2013/07/04/how-much-for-my-ton-of-co2/>
- we extensively us the MARIONET-SCHOOL robots for pedagogy and teaching at all level [13]. It has been exhibited at the BAUMA fair (Munich) by german colleagues, at INNOROBO (Lyon), at the JNRR (Annecy) and during the APMEP (association of mathematics professors) workshop (Marseille)
- 95

## **CORIDA Project-Team**

### **7.3. Popularization**

In December 2013, Karim Ramdani organized with Estelle Carciofi a **workshop dealing with issues related to scientific edition.**

**CORTEX Team (section vide)**

## **CQFD Project-Team**

### **9.3. Popularization**

B. de Saporta took part in a speed mediation event at Inria Bordeaux Sud Ouest (dec. 2013).

## **CRYPT Team**

### **6.3. Popularization**

Phong Nguyen gave several invited talks:

- [17] at the Workshop on Number Theory, Geometry and Cryptography in UK.
- [16] at the Workshop on Algebraic Aspects of Cryptography in Japan.



## **DAHU Project-Team**

### **7.3. Popularization**

Serge Abiteboul participated to a popularization book on mathematics, « Mathématiques, l'explosion continue », with an article, Chercher sur le Web : juste un point fixe et quelques algorithmes.

Serge Abiteboul wrote with Pierre Senellart an article on “ Un déluge de données”, in Pour la science sur le Big bang numérique, 2013.

**DANTE Team (section vide)**

## DEDUCTEAM Exploratory Action

### 8.3. Popularization

- **Seminars in international workshops without peer review**
  - Alejandro Díaz-Caro. Identifying isomorphic propositions. In *First Workshop of ANR-NSFC project LOCALI*. Beijing, China. November 4–6.
  - Pierre Halmagrand. Proof compression and certification in Zenon Modulo. In *Third Workshop of the Amadeus Project for Proof Compression*. Nancy, France. September 16.
  - Gilles Dowek has participated to the workshop Locali in Beijing where he has given a talk.
- **Seminars in national workshops without peer review**
  - Alejandro Díaz-Caro. Identifying isomorphic propositions. In *Journées LAC*. Créteil, France. November 28–29.
  - Alejandro Díaz-Caro. Vectorial types, non-determinism and probabilistic systems: Towards a computational quantum logic. In *Quantum Computing in Nancy*. Nancy, France. March 21.
  - Gilles Dowek has participated to the workshop Rochebrune 2013 *La preuve et ses moyens*, where he has given a talk.
  - Gilles Dowek has given several talks on Computer Science in Education, at the congrès de la SIF, the workshop EPI in Nancy, the workshop UPS in Luminy, the journée ISN in Orsay, the journée Pascaline in Paris, etc.
  - Gilles Dowek has given several popular science talks: in Paris for the young kangaroos, in Athens, and in the Lycée Raoul Follereaux.
- **Other seminars**
  - Alejandro Díaz-Caro. Hacia una lógica computacional cuántica. FCEIA, Universidad Nacional de Rosario. Rosario, Argentine. August 9.
  - Alejandro Díaz-Caro. Vectorial types, non-determinism and probabilistic systems: Towards a quantum computational logic. PPS, Université Paris-Diderot. Paris, France. May 7.
  - Alejandro Díaz-Caro. Vectorial types, non-determinism and probabilistic systems: Towards a quantum computational logic. LIAFA, Université Paris-Diderot. Paris, France. April 16.
  - Alejandro Díaz-Caro. Non determinism (and probabilities) through type isomorphism. LIP, École Normale Supérieure. Lyon, France. February 21.
  - Alejandro Díaz-Caro. Quantum computing, non-determinism, probabilistic systems...and the logic behind. Modal'X. Université Paris X. Nanterre, France. January 31.
  - Pierre Halmagrand. Zenon Modulo: When Achilles outruns the tortoise using Deduction modulo. Mines ParisTech laboratory CRI. Fontainebleau, France. October 30.

**DEFI Project-Team (section vide)**

**DEMAR Project-Team (section vide)**

## **DIANA Team**

### **9.3. Popularization**

Arnaud Legout made a presentation on “Exploration macroscopique du graphe social de Twitter” to a user group interested in network security called OSSIR. See <http://www.ossir.org/paris/supports/index/2013.shtml>.

## 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 ?",

## **DIONYSOS Project-Team**

### **9.3. Popularization**

- G. Rubino makes regular presentations to high school students about the research work in general, and specific technical topics in particular. Titles of 2013:
  - Using randomness for solving deterministic problems
  - Internet as a research problem
  - Great challenges in maths: Riemann Hypothesis
  - Great challenges in math/computer science: the “P versus NP” problem



## **DISCO Project-Team**

### **9.3. Popularization**

Catherine Bonnet spoke at the "Cérémonie de remise des prix des Olympiades de Mathématiques, Ministère de l'éducation nationale, juin 2013. She gave a talk and met high school students groups at the event "Sciences au Carré" in the context of Fête de la Sciences, CNES, October 2013.

Alban Quadrat was invited to give a popularization talk on the development of ideas in mathematics and physics at the conference "Lieux de passage en Science-Fiction", University of La Rochelle (France), Lettres, Langues, Arts et Sciences Humaines (FLASH), 11-13/04/13.

## **DOLPHIN Project-Team**

### **9.3. Popularization**

- Fête de la science
- Big Data Event (Mar 2013): Conference for industrial - Intervention on “Modeling and multi-objective optimization for knowledge discovery”

**DRACULA Project-Team (section vide)**

**DREAM Project-Team (section vide)**

## DREAMPAL Team

### 9.3. Popularization

Philippe Marquet is vice-president of the *Société informatique de France*, the French professional society in computer science.

Philippe Marquet is involved in scientific popularization, mostly within the context of a partnership of between the Inria Lille - Nord Europe Research Center, the University Lille 1, and the Académie of Lille. He organizes and participates to the visit of classrooms on the Inria Plateau at EuraTechnologies, promoting interactions between the scientific community and secondary school students and their teachers. This year, 30 “provisseurs”, 30 teachers, and about 170 students spend half a day on the Plateau. He has designed the [isnlilleacademie.fr](http://www.isnlilleacademie.fr) web site (<http://www.isnlilleacademie.fr>), an information site on the *spécialité ISN* (computer and digital science in french high schools) for pupils, students, and their parents’.

Philippe Marquet is a member of the editorial board of 1024, the new bulletin of the *Société informatique de France* that aims at showing informatics, science and technology, in all its dimensions. 1024 targets a wide audience, from high school students to researcher, including anyone interested in computer science.

## DYLISS Project-Team

### 8.3. Popularization

- *Bioinfo-fr.net* Bioinfo-fr.net is a french web site where researchers, engineers and students talks about bioinformatics. We have written 6 articles for this web site on diverse subjects: metabolic networks, genome assembly, phylogenetics. [G. Collet, S. Prigent]. [\[more info\]](#).
- *Participation at Rennes Village des Sciences for French National Science day* (Fête de la Science). Title : *Crazy random walks*. Description : Popularization Festival where researchers present scientific themes. [V. Picard]
- *Fête de la science (LINA, Nantes)* During the 24th of october, 250 students discovered bioinformatics, genome assembly and algorithmic by practicing games and tutorials made by our team with the help of Julien Gras and Marko Budinich (LINA) [J. Bourdon, D. Eveillard, G. Collet].
- *Organization of Sciences en Cour[t]s*. Popularization Festival where PhD students explain their thesis via short films. [S. Prigent, C. Bettembourg, G. Garet] [\[more info\]](#).

**DYOGENE Project-Team (section vide)**

**E-MOTION Project-Team (section vide)**



**ESPRESSO 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.

**FLOWERS Project-Team**

## **FLUMINANCE Project-Team**

### **9.3. Popularization**

Etienne Mémin

- E. Mémin. Ou vont les nuages ?, Un jour, une brève, Mathématiques de la planète terre, (Brève)
- Invited paper in the journal "Revue française de photogrammétrie et de Télédétection", Outils méthodologiques d'analyse d'images MSG : estimation du mouvement, suivi de masses nuageuses et détection de fronts, with T. Corpetti, V. Dubreuil, E. Mémin, O. Planchon, C. Thomas.
- Invited paper in the journal de la Société Française de Statistique, Image data assimilation with filtering methods, with Anne Cuzol.

## **FOCUS Project-Team**

### **8.3. Popularization**

**Simone Martini** has carried out extended work of scientific divulgation:

- member of the technical committee of Olimpiadi del Problem Solving (at Italian Ministry of Education), <http://www.olimpiadiproblemsolving.com>;
- the talks “Calcolo e simboli: la scienza digitale. A.M. Turing a cent’anni dalla nascita”, Accademia di Agricoltura Scienze e Lettere di Verona; “Problem solving tra linguaggio e competizione”, Workshop ‘Olimpiadi e Informatica’, Verona, 22 novembre 2013.

In addition, **S. Martini** and **U. Dal Lago** gave a series of lectures (20 hours altogether) to the students of "Collegio Superiore", a college of excellence at the University of Bologna (general students, not limited to Computer Science). The course was about algorithms, computational complexity, and cryptography.

**FORMES Team (section vide)**

## **FUN Project-Team**

### **8.3. Popularization**

- Tahiry Razafindralambo gave a popularization talk "Introduction to Wireless Sensor Networks" at Distributed Computing Department / Universidad de Chile.
- Nathalie Mitton gave a talk on "Introduction to RFID" to Terminales ES and S and "Introduction to Wireless Sensor Networks" to 4e and 3e in the framework of "Journées de la Science".
- Ibrahim Amadou gave a talk on "Introduction to Wireless Sensor Networks" in the framework of "Journées de la Science".

**GALAAD Project-Team (section vide)**



**GALEN Project-Team (section vide)**

## GALLIUM Project-Team

### 9.3. Popularization

Jacques-Henri Jourdan and Arthur Charguéraud participated in the organization of the Castor computer science contest (<http://castor-informatique.fr/>). This contest aims at making computer science more popular in French high schools and junior high schools. It attracted over 170,000 participants.

Fabrice Le Fessant is one of the organizers of the OCaml meetup in Paris. Four events were organized in 2013, each featuring four short presentations on topics related to OCaml. Each event was attended by about 60 participants.

Xavier Leroy gave a tutorial on using theorem provers in programming language research at the 2013 ACM SIGPLAN Programming Languages Mentoring Workshop, which was attended by about 80 undergraduate, graduate and post-doctoral students.

Since 2012, the Gallium team publishes a research blog at <http://gallium.inria.fr/blog/>, edited by Gabriel Scherer. This blog continued its activity in 2013, with 26 posts by 12 different authors. It covered various changes in the OCaml language, announced small software libraries from members of the team, and discussed Gallium's research, notably the Mezzo language.

**GAMMA3 Project-Team (section vide)**

## **GANG Project-Team**

### **8.3. Popularization**

#### **8.3.1. scientific popularization**

**Participant:** Laurent Viennot.

Laurent Viennot is correspondent for the Inria Paris-Rocquencourt center concerning scientific popularization. In that context, he has participated to a document describing how scientific popularization actions could take place at Inria [26]

**GECO Project-Team (section vide)**

## **GENSCALE Project-Team**

### **9.3. Popularization**

- Participation to the event "A la découverte de la recherche" (presentation of the research activity to high school students) [C. Lemaitre, P. Peterlongo]
- Participation to the event "Professional Meeting" (talk: discovering bioinformatics), IUT Lannion [D. Lavenier]
- Production of a short movie of PhD subject popularization. [M. Le Boudic-Jamin] <https://doctoriales2013.ueb.eu/content/posters>

## GEOMETRICA Project-Team

### 9.3. Popularization

Jean-Daniel Boissonnat, Au delà de la dimension 3, Caféin Inria Sophia Antipolis.

Jean-Daniel Boissonnat, Geometry Understanding in Higher Dimensions. Conference for the students of ENS Lyon (Inria Sophia Antipolis)

Monique Teillaud, “à quoi sert un triangle ?”, 2x2h, Collège Le Prés des Roures, Le Rouret, in the framework of the national Week of Mathematics.

Steve Oudot was coordinator of the *Photomaton 3d* booth at the *Nuit des chercheurs* event at École polytechnique in September 2013. Marc Glisse, Maks Ovsjanikov, Mickaël Buchet, and Thomas Bonis also participated.

## GEOSTAT Project-Team

### 8.3. Popularization

- H. Yahia made a presentation (title: *Dynamique océanique turbulente à super-résolution*. at the Unithé seminat, on September 2àth, 2013, Inria BSO).
- O. Pont participated to the "Ateliers de Médiation Scientifique" (Inria BSO).
- O. Pont did a radio interview with RFC radio station: “Que cherchent-ils ?”.



## **GRACE Project-Team**

### **9.5. Popularization**

- Alain Couvreur gave a talk at *UniThé ou Café*, a monthly science popularization event dedicated to all the employees of Inria Saclay.
- Daniel Augot presented bit operations, the Hamming code, the one-time pad and a bit of steganography to high school students in Courcouronnes, 10/04/2013.

## **GRAND-LARGE Project-Team**

### **7.3. Popularization**

Christine Eisenbeis est membre du conseil scientifique des programmes du centre d'Alembert, Centre Interdisciplinaire d'Étude de l'Évolution des Idées, des Sciences et des Techniques (CIEEIST), de l'université Paris-Sud.

## **GRAPHIK Project-Team**

### **9.3. Popularization**

Patrice Buche was invited to give a talk about Packaging Decision support system involving flexible querying and argumentation at ANR Ribenut final meeting in November, 14 2013 (Avignon)

## **HIEPACS Project-Team**

### **9.3. Popularization**

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

The **HIEPACS** members have organized the PATC training session on Parallel Linear algebra at "Maison de la simulation" in Saclay from March 26th to March 28th. Mathieu Faverge also gave a full day lecture on dense linear algebra libraries at the PRACE Summer School at CINECA.

## **HIPERCOM2 Team**

### **9.3. Popularization**

- **Futur en Seine**, in Paris, June 2013. The HIPERCOM2 team was very active and presented demonstrations of Wireless Sensor Networks with a focus on the context of Smart Cities. The demonstration prepared by Cédric Adjih, Ichrak Amdouni, Hana Baccouch, Ridha Soua and Ala-Edin Weslati concerned the principles of wireless sensor networks, the energy-efficient routing protocol, the node coloring algorithm running in the OCARI network to maximize network lifetime; along with application of wireless sensor networks to Smart Cities. The open testbeds for wireless sensor networks, Senslab and Equipex-FIT were also presented: what do they offer and how to use them.
- Nadjib Achir, Cédric Adjih, Hana Baccouch, Ichrak Amdouni and Ridha Soua explained the principles of communication and routing in wireless sensor networks and organized several demonstrations for undergraduates and students who visited Inria in February 2013.

## HYBRID Project-Team

### 9.3. Popularization

- Massive media coverage of the results of OpenViBE2 project (section 8.2.5 ) : following a press conference and press release organized in January 2013. This ended up with numerous appearances in the media (TV, Press, Radio).
- "Journées Nationales d'Archéologie" 2013 : organization and numerous demos of immersive and VR results of our team in Immersia room, Rennes, June 2013 [33].
- "Festival de la Science" 2013 : booth and demo of the FLYVIZ system, in Betton, October 2013.
- "Nuit de la Science" 2013 : demos of FLYVIZ system and Corvette project, Rennes, October 2013.
- "Colloque Chimie et TIC 2013" : presentation "Interagir par la pensée avec les Interfaces Cerveau-Ordinateur" (A. Lécuyer), Maison de la Chimie, Paris, October 2013.
- "Journées Science et Musique" 2013 : organization of this event, and presentation of several demos of the team in Immersia room, Rennes, October 2013.

**Hycomes Team (section vide)**

**I4S Project-Team (section vide)**



**IBIS Project-Team (section vide)**

**IMAGINE Project-Team (section vide)**

## IMARA Project-Team

### 9.3. Popularization

Several members of the team have participated in the exhibition Futur-en-Seine (104, Paris, June 13-16 2013) by presenting the CITRIS association and explaining videos to industry (June 13-14) and public (June 15-16).

Guillaume Tréhard supervised three students from the Lycée Henri Bergson, Angers for their TIPE (TIPE, travaux d'initiative personnelle encadrés) "Assistance au freinage d'urgence par contrôle moteur d'un véhicule électrique".

Jean-Marc Lasgouttes has presented "some solvable models for road traffic" at the *demi-heure de science* of the Paris–Rocquencourt Inria research center.

## IN-SITU Project-Team

### 9.3. Popularization

Wendy Mackay was interviewed for Inria/Technoscope: "L'interaction homme-machine en ligne de mire", February, 2013, and for an article in "Science & Vie" on the topic of Google Glass, November 12, 2013.

Wendy Mackay was interviewed on two *France Culture* radio shows: "Place de la Toile" on the topic of tomorrow's computers ("l'ordinateur de demain") on September 7, 2013 and on "Science Publique" on the topic of whether augmented reality will change our vision of the world ("La réalité augmentée va-t-elle changer notre vision du monde?") on November 1, 2013.

Wendy Mackay and Michel Beaudouin-Lafon were each interviewed as the scientist of the day ("savant du jour") on the *France Inter* radio show "On va tous y passer", on October 30 and November 20, 2013 respectively.

## INDES Project-Team

### 8.4. Popularization

The Web is becoming the richest platform on which to create computer applications. Its power comes from three elements: modern Web browsers enable highly sophisticated graphical user interfaces (GUIs) with 3D, multimedia, fancy typesetting, among others; calling existing services through Web APIs makes it possible to develop sophisticated applications from independently available components; and open-data availability allows access to a wide set of information that was unreachable or that simply did not exist before. The combination of these three elements has already given birth to revolutionary applications such as GoogleMaps, radio podcasts, and social networks.

The next step is likely to be incorporating the physical environment into the Web. Recent electronic devices are equipped with various sensors (GPS, cameras, microphones, metal detectors, speech commands, thermometers, motion detection, and so on) and communication means (IP stack, telephony, SMS, Bluetooth), which enable applications to interact with the real world. Web browsers integrate these features one after the other, making the Web runtime environment richer every day. The future is appealing, but one difficulty remains: current programming methods and languages are not ideally suited for implementing rich Web applications. This is not surprising as most have been invented in the 20<sup>th</sup> century, before the Web became what it is now.

Traditional programming languages have trouble dealing with the asymmetric client-server architecture of Web applications. Ensuring the semantic coherence of distributed client-server execution is challenging, and traditional languages have no transparent support for physical distribution. Thus, programmers need to master a complex gymnastics for handling distributed applications, most often using different languages for clients and servers. JavaScript is the dominant Web language but was conceived as a browser only client language. Servers are usually programmed with quite different languages such as Java, PHP, Ruby, etc. Recent experiments such as Node.js propose using JavaScript on the server, which makes the development more coherent; however, harmonious composition of independent components is still not ensured.

In 2006, three different projects, namely, GWT from Google, Links from the University of Edinburgh, and HOP from Inria (<http://www.inria.fr>) [6], offered alternative methods for programming Web applications. They all proposed that a Web application should be programmed as a single code for the server and client, written in a single unified language. This principle is known as multitier programming.

Links is an experimental languages in which the server holds no state and functions can be symmetrically called from both sides, allowing them to be declared on either the server or the client. These features are definitely interesting for exploring new programming ideas, but they are difficult to implement efficiently, making the platform difficult to use for realistic applications.

GWT is more pragmatic. It maps traditional Java programming into the Web. A GWT program looks like a traditional Java/Swing program compiled to Java bytecode for the server side and to JavaScript for the client side. Java cannot be considered as the unique language of GWT, however. Calling external APIs relies on JavaScript inclusion in Java extensions. GUIs are based on static components declared in external HTML files and on dynamic parts generated by the client-side execution. Thus, at least Java, Javascript, and HTML are directly involved.

The HOP language takes another path relying on a different idea: incorporating all the required Web-related features into a single language with a single homogeneous development and execution platform, thus uniformly covering all the aspects of a Web application: client-side, server-side, communication, and access to third-party resources. HOP embodies and generalizes both HTML and JavaScript functionalities in a Scheme-based platform that also provides the user with a fully general algorithmic language. Web services and APIs can be used as easily as standard library functions, whether on the server side or client side.

In order to popularize HOP, we have written a paper for targeting engineers which presents an overview of the HOP language and its development environment. It has been simultaneously published in ACM Queue and Communications of the ACM [5]. We have also given several demonstrations of the system. In particular,

Cyprien Nicolas has co-developed application software for an educational cable robot (Coprin) presented at the Fête de la Science, in November. The demo consisted in a Cable bot built by a Coprin student and piloted by Hop, the software being written by a Indes student. The demo took place in front of four classes of High School students.

## IPSO Project-Team

### 7.3. Popularization

- Web interview of E. Faou: A l'occasion de la remise de la médaille Blaise Pascal (2013), Inria website.
- In <http://interstices.info/planetes> (2013), popularization article on the field of geometric numerical integration, published in "Interstices". Theme "Mathématiques de la planète Terre 2013" and Theme 2012-2013 "Invariants et similitudes" of TIPE in preparatory classes.
- Interview (June 2012) of M. Lemou for the journal "Science de l'Ouest" on the stability of galactic models. and publication of a popularized article: "Les mathématiciens déchiffrent l'univers" in the the journal "Espace des sciences", Nov 2012.
- M. Lemou and F. Méhats wrote a popularized scientific text in a CNRS letter "Lettre de l'INSMI", june 25th, 2012.

**KERDATA Project-Team (section vide)**



## LAGADIC Project-Team

### 9.3. Popularization

- Due to the visibility of our experimental platforms, the team is often asked to present its research activities to students, researchers or industry. Our panel of demonstrations allows us to highlight recent results concerning the positioning of an ultrasound probe by visual servoing, the construction of a tower by combining 3D model-based visual tracking and visual servoing techniques to pick up cubes that are assembled, the navigation of a mobile robot in urban environments, vision-based detection and tracking for space navigation in a rendezvous context, the semi-autonomous navigation of a wheelchair, and augmented reality applications.
- Fabien Spindler is a member of the editorial board of “Ouest Inria”, the internal journal at Inria Rennes-Bretagne Atlantique.
- Alexandre Krupa co-authored an article titled “Au coeur des hommes” in the journal DocSciences that is intended for general public. This article is about medical robotics guided from images [27]. An article entitled “L’asservissement visuel au service de la robotique médicale” has also been published in May 2013 in the “Emergences” general-public magazine of Inria Rennes-Bretagne Atlantique <http://emergences.inria.fr/lettres2013/newslettern26/126asservissementvisuel>.
- Paolo Robuffo Giordano participated to the “Café des sciences Drones” at the “Espace des sciences” in Rennes in November 2013 to illustrate his activities on quadrotor UAVs to the general public.
- Marie Babel and François Chaumette participated to the “Science Festival” in October 2013 with a debate after the projection of the film “Vivre avec des robots” in Brécé near Rennes.
- Marie Babel and François Pasteau gave a 1-hour lecture on “Assistance to the mobility: the place of the robotics” on December 13th, during the “Conf’Lunch” monthly seminar organised by Inria in Rennes. Furthermore, two articles related to wheelchair navigation have been published in general-public magazines, namely “Des yeux pour les fauteuils roulants” in “Emergences” in July 2013 ([http://emergences.inria.fr/lettres2013/newsletter\\_n27/L27-FAUTEUIL](http://emergences.inria.fr/lettres2013/newsletter_n27/L27-FAUTEUIL)) and “Un fauteuil qui a les yeux en face des roues” in “Sciences Ouest” (the magazine of the “Espace des sciences” in Rennes) in November 2013 (<http://www.espace-sciences.org/sciences-ouest/314/actualite/un-fauteuil-qui-a-les-yeux-en-face-des-roues>).

## **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).

**LFANT Project-Team (section vide)**

## **LINKS Team**

### **8.3. Popularization**

Within the Initiative ‘Chercheurs à l’École’ during the ‘Fête de la science 2013’ in October, Iovka Boneva has done presentations for high-school students in two lycées in Villeneuve d’Ascq and Marcq en Baroeul.

## **LOGNET Team**

### **9.3. Popularization**

The LogNet team has conducted two dozen circa of sessions of popularization of the myMed software (typically an “atelier de formation au réseau social myMed”). Public are typically students, administration people of many town or institutions (CG06, Mairies, Hospital, etc.).

## **M3DISIM Team**

### **8.3. Popularization**

TV News Story “**la météo du coeur**” (how to predict the heart weather) on France5 “Magazine de la santé” (11 March 2013)

D. Chapelle invited speaker at “**Horizon Maths 2013**”

**MADYNES Project-Team (section vide)**

## MAESTRO Project-Team

### 8.3. Popularization

Activities are presented in chronological order:

- The article titled “Internet” (interview of S. Alouf by E. Kuntzelmann, as reported in the 2012 activity report) has appeared in *Savoirs Jeunes* (14 January 2013). It is available here: <http://www.savoirs.essonne.fr/sections/ressources/questions-a/resource/internet/>.
- E. Altman and A. Reiffers participated in a round-table on the network economy in France, organized at the National Assembly in Paris (28 February 2013).
- A short publication [80] by M. Cosnard and E. Altman has appeared in *01Business* on the network neutrality debate in France (11 July 2013). It is intended for a large audience and presents advantages in legislating on this topic.
- E. Altman presented a talk at the 9th Mediterranean rendez-vous entitled: “The new networks - Cradle of globalized culture in the Mediterranean Area” at Marseille, with the participation of leading political and economical figures from Mediterranean and Middle Eastern countries (9 November 2013).
- S. Alouf delivered a conference titled “Internet ou Web ?” at Inria, Sophia Antipolis, for a group of high school students (22 November 2013).

S. Alouf is a member of MASTIC, a commission in charge of popularization and regional and internal scientific animation (since November 2011).



## MAGIQUE-3D Project-Team

### 9.3. Popularization

- The short movie “Probing the invisible, from the earthquake to the model” realized by MAGIQUE-3D in 2010, has been presented at Unesco during the day “Mathematics for Planet Earth”, on March 5th 2013 <http://mpe2013.org/fr/mpe-day-at-unesco/>. It is also part of the virtual exhibition “Mathematics of Planet Earth <http://imaginary.org/fr/node/134>”
- H el ene Barucq is member of the scientific board created for helping to the organization of a mobile exhibition in favor of the equality between girls and boys. The exhibition will be held in Pau in June 2014.
- Juliette Chabassier has written a short paper, “Simuler le son d’un piano” , on the website of Math ematiques de la plan ete Terre 2013, “Un jour, une br eve”, <http://mpt2013.fr/facteur-de-piano-numerique> [75].
- Juliette Chabassier has written a short paper, “Le piano r ev e des math ematiens” , in the book “Math ematiques: l’explosion continue”, <http://hal.inria.fr/hal-00913685>.
- Juliette Chabassier has published a website on the piano modeling, <http://modelisation.piano.free.fr>.
- Julien Diaz participated to the “Journ ees jeunes chercheurs en math ematiques du lyc ee de Navarre / UPPA” <http://univ-pau.fr/live/newsletter/newsletter-n46/journeesmaths?isPdf=1>, March 20th-22th, 2013.
- Julien Diaz has written an article, “Prospection p etroli ere : le sous-sol r ev el e”, in the TDC (Textes et Documents pour la classe) journal, for high-school teachers, <http://www.cndp.fr/tdc/tous-les-numeros/les-mathematiques-de-la-terre.html> [77].
- Julien Diaz has written a short paper, "Jeter un  eil “Au centre de la Terre” , on the website of Math ematiques de la plan ete Terre 2013, “Un jour, une br eve”, <http://mpt2013.fr/jeter-un-oeil-au-centre-de-la-terre/> [76].
- Victor P eron participated to the “Journ ee d’Immersion des Lyc eens   l’Universit e de Pau” and has given a talk “Probing the invisible, from the earthquake to the model”, November 28th, 2013.

**MAGNET Team (section vide)**

## **MAGNOME Project-Team**

### **9.3. Popularization**

Magnome participated in « UniThé ou Café » in the Inria Bordeaux – Sud-Ouest research center.

Anna Zhukova animated one of the Inria workshops at the 2013 “Fête de la Science”

David Sherman is a member of the Inria Bordeaux – Sud-Ouest’s “Scientific Culture” committee, which organizes and proposes various scientific popularization actions.

## MAGRIT Project-Team

### 9.3. Popularization

Members of the team participate on a regular basis, to scientific awareness and mediation actions:

- Erwan Kerrien heads the local Scientific Mediation Committee. Among other activities, he was invited to last Didapro5-DidaSTIC conference (didactics of computer science) as a panelist and was an associate researcher to a MATH.en.JEANS workshop.
- Pierre-Frédéric Villard participated to various activities in the IUT of Saint-Dié des Vosges: open days, science festival, science café, Film screening following by a debate and computer science presentations to schoolgirls to promote science.
- In an exploratory experiment conducted in collaboration with the IUFM de Lorraine (teacher training institute), we investigated the use, the usefulness and the impact of an innovative Augmented Reality Environment for teaching/learning astronomy at primary school [15]. An AR learning environment has been designed whose aim is to show augmented views of some celestial bodies and support the pupils' investigations using spatial visual guides and views from a terrestrial observer. Each child was asked to solve problems related to astronomy in two different conditions in which they had to use and manipulate: (1) the traditional learning environment (i.e., with physical models), or (2) the Augmented Reality environment. Preliminary results show that the declarative knowledge related to astronomy was higher with the AR Environment. Only AR users have developed scientific conceptions of the explored astronomical phenomena and learnings have been significantly improved. Furthermore, we presented some arguments in order to support the assumption that the AR model assists the process of scaffolding, promotes collaborative learning by reducing cognitive load, and takes part to the motivation dynamic by enhancing task controllability.
- We have designed and developed a software whose aim is to support students with learning computer programming. This software, named artEoz, enables a pedagogical view of the computer memory, dynamically changing while the user program is running [26]. Using a nice visualization helps to understand the behavior on an object oriented program. This software concerns beginners as well experimented students thanks to its facilities to draw complex data structures. artEoz can be freely downloaded for academic use only from <http://arteoz.loria.fr>. This software is licensed by the APP (French agency for software protection).

## MAIA Project-Team

### 9.3. Popularization

- François Charpillat participated to the popularization of the robotic and Ambient Intelligence activity of the maia team :
  - <http://videotheque.inria.fr/videotheque/media/25615>
  - <http://videotheque.inria.fr/videotheque/doc/809>
  - <http://vimeo.com/78659657>
  - <http://vimeo.com/83727993>
- The popularization article by Alain Dutech, Bruno Scherrer and Christophe Thiéry on Reinforcement Learning for the game of Tetris, that was first published at Interstices, was revised and published at Images des Mathématiques [44].
- Vincent Thomas has organized, in collaboration with the "Bibliothèque Universitaire du Campus Lettres", an exposition "jeux: les ateliers de la pensée" where the main objective is to promote games as an interesting subject for academics. This exposition included two days of vulgarization seminars with specialists of several scientific fields (economy, psychology, computer science) and animations. See [http://ticri.inpl-nancy.fr/wicri-lor.fr/index.php?title=Exposition\\_Jeu](http://ticri.inpl-nancy.fr/wicri-lor.fr/index.php?title=Exposition_Jeu). The material of the exposition will be presented in several university libraries of the Université de Lorraine in the first half of 2014.
- Vincent Thomas participated in "Journée ISN-EPI" (Jun. 27 2013) whose audience is computer science teachers of secondary school by making a presentation on "games and artificial intelligence" and by organizing a workshop on the same subject. Vincent Thomas is participating in the LORIA IDEES group dedicated to teaching activities <http://idees.loria.fr/index.php?n=Main.ProgrammeJourneeISN-EPI>.
- Vincent Thomas participated in "Dans les coulisses d'un labo d'informatique" (Mar. 21 2013) by proposing an animation about "artificial intelligence and video games" for secondary school students <https://iww.inria.fr/NanSciNum/dans-les-coulisses-dinria-nancy-grand-est-2/>.
- Vincent Thomas and Olivier Buffet participated in "Fête de la Science" by organizing a workshop on board games and artificial intelligence (Oct. 10 and 12). See <https://iww.inria.fr/NanSciNum/un-ticet-pour-la-science/>.
- Nazim Fatès animated two debates following the presentation of the film *Codebreaker* which is a "biopic" dedicated to Alan Turing: in January, it was presented at the Lycée Jean-Moulin in Forbach; in November, it was presented in the main cinema of Saint-Dié-des-Vosges (organisation by "Festival du film de chercheur").
- Christine Bourjot, Alain Dutech and Nazim Fatès participated in a debate on artificial intelligence in the café "l'Irlandais" with a public mainly constituted of university students.

## MANAO Team

### 8.3. Popularization

#### 8.3.1. Exhibitions

Organization of the Inria's booth at Siggraph 2013, Anaheim, US.

Participation at the temporary exhibition "Eternal Egypt" at the Museum "Allard Pierson" in Amsterdam, The Netherlands, with the interactive spatial augmented reality setup "The Revealing Flashlight" [26].

Participation at the temporary exhibition "Du Nil à Alexandrie. Histoires d'eaux" at the Museum "Mariemont" near Bruxelles, Belgium with the 1/5 scale reproduced reassembled Isis statue within the ANR SeARCH project.

#### 8.3.2. Tutorials and Workshops

Tutorial on the Eigen library at Cg-libs, Italian Eurographics chapter, June, Pisa, Italy.

Tutorial at Eurographics 2013, Girona, Spain

Tutorial at German Conference on Pattern Recognition 2013, Saarbrücken, Germany

Workshop at the Nodem 2013 conference: "Interactive exhibitions with 3D content: Virtual Museums - Workshop", December, Stockholm, Sweden.

#### 8.3.3. Miscellaneous

Organization of Miniforum 3D - a meeting between students, researchers, and local industry

## **MARELLE Project-Team**

### **8.3. Popularization**

Yves Bertot participated to two articles published in popular science magazines (*Science et Vie* and *Science et Avenir*) and Laurence Rideau to one of these articles.

**MASAIE Project-Team (section vide)**



**MATHRISK Project-Team (section vide)**

**MAVERICK Project-Team (section vide)**

## **Maxplus Project-Team**

### **9.3. Popularization**

- J.P. Quadrat :
  - Administre le site d'intérêt général <http://www.maxplus.org>, dédié à l'algèbre max-plus.

**MC2 Project-Team (section vide)**

## **MCTAO Project-Team**

### **9.4. Popularization**

Jean-Baptiste Caillau: “Mathematics for planet Earth 2013”: <http://mpt2013.fr/tout-autour-de-la-terre/>, <http://mpt2013.fr/de-la-terre-a-la-lune/>, <http://mpt2013.fr/tout-autour-de-la-terre-2nde-partie/>.

## 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.

## MEXICO Project-Team

### 8.3. Popularization

**Benedikt Bollig** gave an invited talk at the German Workshop “Automaten und Logik”, held on September 25, 2013, in Ilmenau.

**Paul Gastin** has given a talk on “*Automates: Applications et Algorithmique*” during the *Rencontres Algorithmiques et Programmation*, addressing secondary teachers of the *classes préparatoires* level, at CIRM Marseille, 6 to 10 May. He also gave an invited talk on *Evaluation of Weighted Specifications over Nested Words* for the opening of the research training group *Quantitative Logics and Automata (QuantLa)*, Leipzig, on April 30.

**MICMAC Project-Team (section vide)**



**MIMETIC Project-Team (section vide)**

## MINT Project-Team

### 8.3. Popularization

- “*Douglas Engelbart, inventeur et visionnaire*”, an article for the **Interstices** web site (J. Aceituno & N. Roussel, December 20th)
- **MIRIM**, an installation within Inria’s demonstration area at EuraTechnologies to illustrate the experimental nature of HCI research (M. Amberg, M-A. Dupré & N. Roussel, starting from October)
- **Interview** with Benoit Georges, from Les Echos, published as a supplement to his article on **novel interfaces for tablets, smartphones and computers** (N. Roussel, October 14th)
- *Chercheurs itinérants*: brief introduction to research topics for high-school students (J. Aceituno, L. Grisoni, L. Potier, H. Rateau, Y. Rekik & N. Roussel, October)
- Invited talk for a group of high-school teachers from Nice academy involved in the ISN (*informatique et sciences du numérique*) specialty (N. Roussel, June 4th)
- Co-organization of the press and VIP tour of the interactive exhibition of the ACM CHI conference in Paris (N. Roussel, April 29th)
- “*A propos de l’interaction homme-machine*”, a podcast for the **Interstices** web site (N. Roussel, April 26th)
- Invited talk as part of the launch of the 2013 “Questions numériques” publication by FING (N. Roussel, February 21st)

**MISTIS Project-Team (section vide)**

## MNEMOSYNE Team

### 8.3. Popularization

For a multi-disciplinary team as Mnemosyne, science popularization is not a nice and useful contribution to the dissemination of scientific knowledge but also a necessity since we work with colleagues from bio-sciences with whom sharing profound ideas in computer science is mandatory for a real collaboration.

- Thierry Viéville is half-time involved in popularization actions both at a concrete level [21], [23], [22], [9], [10] (including on Mnemosyne subjects [25], [20] and at the methodological level [15], [29], [18]. This explains the rather huge amount of publications on these external subjects in this document.
- “A small history of cyber-criminality” at the Journées pédagogiques sur ISN (N. Rougier, June)
- “About brain modeling”, Interstices podcast, (N. Rougier, February)
- Participation to the program “Science Publique”, on the french national radio France Culture to a one-hour debate entitled “What can we expect from an artificial human brain?” (F. Alexandre, January).

**MOAIS Project-Team (section vide)**

## **MODAL Project-Team**

### **9.3. Popularization**

Alain Celisse has given a talk in “30 minutes de science” that is proposed to all Inria team members to illustrate the type research carried out within the different teams in Lille. This talk was about kernel change-point detection.

## **MODEMIC Project-Team**

### **8.3. Popularization**

The team has participated to the writing of a blog [73], [72] for the MPT2013, french edition of Mathematics of the Planet Earth 2013.

The team has participated to the writing of two articles [31], [32] in the TDC magazine dedicated to teachers in secondary classes.

## 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.



## **MOKAPLAN Exploratory Action**

### **8.2. Popularization**

Jean-David Benamou run a Ipython Notebook web site <https://mathmarx.rocq.inria.fr:9999> on which simple Optimal Mass Transportation algorithm are coded in python and can be tested and modified.

## **MORPHEME Project-Team**

### **7.3. Popularization**


- Xavier Descombes has given a conference in Nice within the program “Science au Lycée”.
- Xavier Descombes has given a seminar in Marseille University in a workshop dedicated to multi-disciplinarity.

**MORPHEO Team (section vide)**

## MUTANT Project-Team

### 9.3. Popularization

MuTant team was featured in the 2nd edition of **Made In France (MIF) Expo** in the major Exhibition Hall in Paris (Porte de Versaille) with a **dedicated stand** for Antescofo with more than 3 million visitors during 3 days.



.../mutant/IMG/ONFI3.jpg

Figure 6. Antescofo demo in Ministry of Industry featuring Marlène Schaff (French *THE VOICE*, Season 2)

Antescofo was featured by the French Ministry of Industry for a public talk and largely diffused demo featuring the french star singer Marlène Schaff from *The Voice*.

Arshia Cont was invited for a public presentation/demo of *Antescofo* for the 20th anniversary of the **Prix La Recherche**. [Click for video](#).

Jean-Louis Giavitto has co-animated the public discussion following the movie "Codebreaker: Alan Turing" with C. Villani and G. Berry at the Cinema Grand Action. He gave several seminars for a non computer scientist audience:

“Analyse formelle des concepts, Q-analyse et programmation spatiale : quelques aspects philosophiques du nœud mathématique/musique/ informatique, séminaire MaMuPhi, l’Ecole Normale (february 2013);

“Écriture du temps et de l’interaction en informatique musicale”, séminaire Philosophie de l’informatique, de la logique et de leurs interfaces, Centre Cavallès, Ecole Normale, (mars 2013);

“Modélisation spatiale et approche géométrique en musique”, Journées nationales du RNSC (octobre 2013);

“Simultanéité, succession et durée dans l’interaction musicale en temps-réel”, séminaire MaMux Temps, rythme et arithmétique, (décembre 2013).

As the redactor-in-chief of TSI, Jean-Louis Giavitto has initiated a new section devoted to portraits and talking with french personalities in computer science. These articles are also published in the SIF journal.

José Echeveste has presented Antescofo and participated to the event organized for the “Fête des Sciences” at Forum des Halles and UPMC.

We have published a popularization article on "Computer Assisted Music" in the review [DocSciences](#), number 15.

**MYRIADS Project-Team**

**NACHOS 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>

**NEUROMATHCOMP Project-Team (section vide)**

## NEUROSYS Team

### 8.3. Popularization

- Nancy Renaissance 2013 *Moments d'Invention* with stand and talk on conference (L. Bougrain).
- Fête de la Science à Nancy, October 2013 (L. Bougrain et A. Hutt).
- Science Slam Talk on *Sleep and Anaesthesia* at University of Frankfurt / Main, February 2013 (A. Hutt).

**NON-A Project-Team (section vide)**

## 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).

## **OAK Project-Team**

### **8.3. Popularization**

- T. Ghosh, I. Manolescu, A. Tzompanaki, A. Roatiş and S. Zampetakis have presented a graph-based game to the audience of *Fête de la Science* in October 2013.
- Still part of *Fête de la Science* 2013, I. Manolescu has participated to a “speed dating” event between researchers and high-school students in Paris.

## OASIS Project-Team

### 8.3. Popularization

- Françoise Baude is in charge since September 2011 of the set up and animation of an educational program *Cordées de la Réussite*. She leads as Polytech'Nice Sophia member, and in connection with MASTIC activities at Sophia-Antipolis, two *Cordées pour la Science à Sophia* groups (one with Lycée Vinci Antibes, the other with Lycée Tocqueville Grasse). Since 2013, she is in charge of the AVOSTII-STI2D program implementation for Polytech'Nice Sophia, requiring advertising high-school pupils for engineering studies, in particular in ICT.
- Rencontres Inria Industrie:  
The 11th of June 2013, we took advantage of the Inria-Industry national meeting to expose our works on the American basket option pricing. Our strategy relies on a two-level CPU/GPU parallelization of the Picazo algorithm, combining dynamic strategies to fully exploit distributed resources. During the event, we presented the difficulty to price such instruments in reasonable time, and highlight our solution through multiple tests on Grid'5000, of our pricing engine.  
A Video is available here: <http://www.inria.fr/centre/saclay/innovation/rii-modelisation-simulation-calcul-intensif/demos/pricing-d-options-sur-panier-de-type-americain-en-utilisant-des-clusters-equipes-de-gpus>
- This year, Fabrice Huet gave a seminar to high school students about the inner working of computers. He also leads the ISN *Informatiques et Sciences du Numérique* courses for the academia of Nice. These courses were given to high school teachers who volunteered to offer a Computer Science option to their students.

## 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>.



**ORPAILLEUR Project-Team (section vide)**

## PANAMA Project-Team

### 9.3. Popularization

#### 9.3.1. *Journée science et musique*

**Participants:** Nancy Bertin, Frédéric Bimbot, Jules Espiau de Lamaestre, Rémi Gribonval, Corentin Guichaoua, Srđan Kitić, Stéphanie Lemaile, Pierre Machart, Laurent Simon, Nathan Souviraà-Labastie, Stefan Ziegler.

PANAMA coordinated the organization of a public event called “Journée Science et Musique” (Day of Music and Science). This yearly event organized by the METISS/ PANAMA Team since 2011 aims at sharing with the wide audience the latest innovations and research projects in music. The motivation for hosting this event is to explain and promote the technology behind audio-processing that people face in their daily lives. The event is free to everyone and people have the possibility to attend talks by selected speakers or meet numerous experts that demonstrate current projects in which people can interactively participate. Edition 2013 hosted 350 visitors.

#### 9.3.2. *Radio and press*

Nancy Bertin was an invited speaker in the France Inter scientific radio show "La Tête au Carré".

## PAREO Project-Team

### 8.3. Popularization

**Participants:** Jean-Christophe Bach, Pierre-Etienne Moreau.

Jean-Christophe Bach participated to scientific mediation by proposing several activities to demonstrate the *algorithmic thinking* at the core of the Computer Science without requiring any computer or even electric devices. These activities are the first part of the CSIRL (Computer Science In Real Life) project which aims to popularize computer science and to initiate children, school students and non-scientists into this domain. These activities were presented during the high school students welcome at LORIA and Inria - Nancy Grand Est, and also during APMEP<sup>0</sup> days. Jean-Christophe Bach also took part to the “Fête de la science” in October.

Jean-Christophe Bach was also involved in popularization activities with Interstices<sup>0</sup> by writing short debunking articles (“Idées reçues”) for non computer scientists about Church’s thesis and Turing’s work [15]. Other popularization articles are still under work.

Pierre-Etienne Moreau gave two lectures about “Robotics and Programming” in the ISN course (Informatique et Science du Numérique), in order to help professors of “classes de terminale” to teach this discipline.

Pierre-Etienne Moreau organized a three day course about “Algorithms, Programming and Databases” in order to help professors of “classes préparatoires aux grandes écoles” to teach this discipline.

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<sup>0</sup><http://www.apmep.asso.fr/>

<sup>0</sup><http://interstices.info>

## **PARIETAL Project-Team**

### **8.3. Popularization**

PARIETAL presented a game designed by Virgile Fritsch to illustrate our research activities on brain activity decoding, at the Salon de jeux et culture mathématique (May 30<sup>th</sup>-June 2<sup>nd</sup>, 2013).

**PARKAS Project-Team (section vide)**

## **PAROLE Project-Team**

### **9.3. Popularization**

Demonstration (of audio processing and source separation) to high school students at Inria Nancy in March 2013 (E. Vincent).

Demonstration to students of Mines Nancy at Inria Nancy in December 2013 (S. Ouni).

Participation in the Renaissance festival in Nancy in June 2013 (E. Vincent, D. Fohr, Y. Salaün, Y. Laprie, J. di Martino) Demonstrations of automatic speech recognition, speech analysis, source separation, articulatory modeling and voice conversion were presented.

Participation in the 11th Rencontres européennes CNRS Jeunes “Sciences et Citoyens” in Pont-à-Mousson in November 2013 (E. Vincent).

Participation in the Forum Sciences Cognitives, presentation to students in Cognitive Sciences at the University of Lorraine, in November 2013 (S. Ouni) .

**PARSIFAL Project-Team (section vide)**

**PERCEPTION Team (section vide)**



## **PHOENIX Project-Team**

### **8.3. Popularization**

Participation of the Phoenix Inria project team in the following events:

- Salon Aquitec, February 2013
- Accueil d'étudiants de terminale S option ISN, February 2013
- "Fête de la science" (national popular science event), October 2013
- Emilie Balland and Milan Kabac, Metro'Num, talk and demonstration of the HomeAssist project, September 2013
- Héléne Sauzéon, "Conférence prospective : Demain les objets sont connectés !", presentation of the HomeAssist project, 3ème Semaine digitale organized by the Bordeaux city hall, March 2013
- Héléne Sauzéon and Charles Fage, "Autisme et Numérique : Mise en place d'un assistant scolaire pour collégiens porteurs d'autisme", « Journée mondiale de sensibilisation à l'autisme » organized by Collectif Girondin des Associations Autour de l'Autisme, April 2013
- Héléne Sauzéon and Charles Fage, "Mise en place d'un assistant solaire Collège + pour les collégiens porteurs d'autisme", « Journée mondiale de sensibilisation à l'autisme » organized by Centre Ressource Autisme, CHU Poitiers, April 2013
- Héléne Sauzéon, presentation of the School+ project to Vincent Peillon, Point d'étape de l'entrée de l'École dans l'ère du numérique, Ministère de l'éducation Nationale, June 2013

## **PL.R2 Project-Team**

### **7.3. Popularization**

Yann Régis-Gianas organised the "Fête de la Science" event for the computer science department of the University Paris 7.

Yann Régis-Gianas co-organised the "Journée Francilienne de Programmation", a programming contest between undergraduate students of three universities of Paris (UPD, UPMC, UPS).

Yann Régis-Gianas gave several conferences about computer science in several primary schools of Paris.

## POEMS Project-Team

### 9.3. Popularization

Marc Bonnet:

- Opening workshop of UCL Centre for Inverse Problems (London, UK, March 2013),
- Conference honoring Andreas Kirsch for his 60th birthday (Bad Herrenalb, Germany, April 2013),
- International Conference on Novel Directions in Inverse Scattering (Newark DE, USA, July 2013),
- Singular Days (Rennes, France, August 2013)

Laurent Bourgeois

- *On sampling methods to identify defects in a periodic waveguide from far field data*, Inverse Problems: Scattering, Tomography and Parameter Identification, Conference honoring Andreas Kirsch for his 60th birthday, Bad Herrenalb - Germany, 8-11/4/2013
- *On Lipschitz stability for a class of inverse problems*, Inverse Problems and Nonlinear equations, Ecole Polytechnique, Palaiseau, 22-24/05/2013
- *On the far field of scattering solutions in a periodic waveguide. Part II : The inverse problem*, Waves conference, Gammarth, Tunisie, 3-7/6/2013

Aliénor Burel

- *Using potentials in elastodynamics : a challenge for FEM*, WONAPDE, Concepción (Chile), January 14-18th
- *Utilisation des potentiels en élastodynamique : un challenge pour les méthodes éléments finis ?*, GTN Orsay, Université Paris-Sud, February, 19th
- *Effective Transmission Conditions for Thin-Layer Transmission Problems in Elastodynamics*, WAVES '13, Gammarth (Tunisia), June 3-7th
- *Utilisation des potentiels en élastodynamique : un challenge pour les méthodes éléments finis ?*, Poems Seminar, Palaiseau, June 27th

Camille Carvalho

- *Plasmonic cavity modes with sign-changing permittivity*, WAVES, Tunis, June
- *Plasmonic cavity modes: black-hole phenomena captured by Perfectly Matched Layers*, PIERS, Stockholm, August

Maxence Cassier

- *Space-time focusing on unknown obstacles*, International conference in applied mathematics, Heraklion, Greece, September 2013.
- *Space-time focusing for acoustic waves* (poster session), International conference on novel directions in inverse scattering, honoring David Colton, Newark, United states, July 2013.
- *Selective focusing on unknown scatterers*, Maxence Cassier, Christophe Hazard and Patrick Joly, Waves conference, Tunis, Tunisia, June 2013.
- *Selective focusing for time-dependent waves*, Maxence Cassier, Christophe Hazard and Patrick Joly, Workshop: Inverse problems and imaging, institut Henri Poincaré, Paris, France, February 2013.
- *Selective focusing for time-dependent waves*, Maxence Cassier, Christophe Hazard and Patrick Joly, Workshop: Computational electromagnetism and acoustics, Oberwolfach, Germany, January 2013.

Stéphanie Chaillat

- *Fast multipole accelerated boundary integral equation method for 3-D elastodynamic problems in a half-space*, Séminaire EDP LJK, Grenoble, France, November 2013.
- *Fast multipole accelerated boundary integral equation method for 3-D elastodynamic problems in a half-space*, Séminaire Equipe ENI MSSMAT, Chatenay-Malabry, France, November 2013.
- *A fast and adaptive algorithm for the inverse medium problem based on Singular Value Decomposition*. 3rd European Conference on Computational Optimization, Chemnitz, Germany, July 2013.
- *An Adapted Fast Multipole Accelerated Boundary Element Method for 3D Elastodynamics*, SIAM in the Geosciences, Padua, Italy, June 2013.
- *Fast Multipole Accelerated Boundary Element Method for problems in an elastic Half-Space*, WAVES 2013, Tunis, Tunisia, June 2013.
- *Fast multipole accelerated boundary integral equation method for 3-D elastodynamic problems in a half-space*, Séminaire ISTERRE, Grenoble, France, February 2013.
- *Fast multipole accelerated boundary integral equation method for 3-D elastodynamic problems in a half-space*, Séminaire du LMA, Marseille, France, January 2013.
- *Comparison of two Fast Multipole Accelerated BEMs for 3D elastodynamic problems in semi-infinite media*, IABEM 2013, Santiago, Chile, January 2013.

Patrick Ciarlet

- *Strong convergence for Gauss' law with edge elements*, Mafelap'13, Uxbridge (G.-B.), 10-14/06/2013
- *Numerical approximation of transmission problems with sign changing coefficients*, Journées Singulières Augmentées, Rennes, 26-30/08/2013

Sonia Fliss

- *DtN approach for the exact computation of guided modes in a photonic crystal waveguides*, Séminaire EDP de Metz, Metz, January 18th.
- *Sufficient conditions for existence of guided modes in photonic crystal waveguide or how useful can be a numerical method*, Mathematical Methods for spectral problems, University of Helsinki, March 5th-7th
- *Transparent boundary conditions in periodic media*, HF 2013, Nancy, March 19th-21th
- *Scattering in locally perturbed periodic waveguides : forward and inverse problems*, Applied Analysis for the Material Sciences with a special hommage to Michael Vogelius, CIRM Marseille, May 27th-31st
- *On the far field of scattering solutions in a periodic waveguide. Part 1: the forward problem*, Waves 2013, Tunis, June 3rd-7th

Patrick Joly

- *Numerical simulation of a grand piano*, Conference WONAPDE, Concepcion, Chile, January 2013
- *A rigorous approach to the propagation of electromagnetic waves in co-axial cables*, Workshop EMSCA, Weierstrass Institute, Berlin, Germany, May 2013
- *Simulation numérique d'un piano de concert*, Journées EDPs, Contrôle et Musique, Université Pierre et Marie Curie, Paris, May 2013
- *A rigorous approach to the propagation of electromagnetic waves in co-axial cables*, Conference WAVES2013, Gammarth, Tunisia, June 2013
- *Quasi-local transmission conditions and iterative domain decomposition methods for time harmonic wave propagation*, International Conference on Novel Directions in Inverse Scattering, Newark (Delaware), USA, Juillet 2013

- *Riesz potentials and quasi-local transmission condition for iterative non overlapping domain decomposition methods for the Helmholtz equation*, Conference JSA 2013, Rennes, France, August 2013
- *Perfectly Matched Layers for time domain wave propagation : overview and recent progress*, Conference CEDYA 2013, Castellon, Spain, September 2013
- *Conditions de transmission quasi-locales et méthodes de décomposition de domaine pour la propagation d'ondes en régime harmonique*, CMAP Seminar, Ecole Polytechnique, Palaiseau, France, December 2013

Simon Marmorat

- *An improved linear sampling method in the time domain*, WONAPDE 2013, Concepción, Chile, January.
- *Time domain computation of the scattering of waves by small heterogeneities*, Waves 2013, Tunis, Tunisia, June.
- *An asymptotic model for the scattering of waves by small heterogeneities*, Inria Junior Seminar, Rocquencourt, France, November.
- *Méthodes d'échantillonnage pour la diffraction inverse en fréquence et en temps*, POems Seminar, ENSTA, France, December.

Jean-François Mercier

- *Aeroacoustics in a waveguide with a shear flow*, Anne-Sophie Bonnet-BenDhia, Jean-François Mercier et Florence Millot, 11<sup>th</sup> International Conference on Mathematical and Numerical Aspects of Wave Propagation (WAVES' 13), Tunisia (june 2013)
- *Numerical modeling of nonlinear acoustic waves with fractional derivatives*, B. Lombard et J.-F. Mercier, 11<sup>th</sup> International Conference on Mathematical and Numerical Aspects of Wave Propagation (WAVES' 13), Tunisia (june 2013)

Nicolas Salles

- *Explicit evaluation of integrals arising in Galerkin BEM*, XIV International Conference on Boundary Element & Meshless Techniques, Palaiseau (France), July 2013

Antoine Tonnoir

- *New transparent boundary conditions for time harmonic acoustic diffraction in anisotropic media*, Waves International conference on Mathematical and numerical aspects of waves, Tunis, June 2013

Elizaveta Vasilevskaya

- *Localized modes in perturbed ladder-like periodic waveguides*, Workshop on waveguides, ENSTA ParisTech, Palaiseau, France, October 2013

**POLSYS Project-Team (section vide)**

## POMDAPI Project-Team

### 7.3. Popularization

J. Ch. Gilbert has written the following pages on Wikipedia.fr in 2013: [Algorithme des directions alternées](#), [Borne d'erreur](#), [Complémentarité](#), [Cône dual](#), [Ensemble de sous-niveau](#), [Gradient projeté](#), [Inéquation variationnelle](#), [Lagrangien \(optimisation\)](#), [Lemme de Hoffman](#), [Matrice complètement positive](#), [Matrice copositive](#), [Méthode de Gauss-Seidel](#), [Optimisation complètement positive](#), [Optimisation conique](#), [Optimisation convexe](#), [Optimisation copositive](#), [Optimisation SDP](#).

M. Kern gave a talk on “Mathematics and Simulation” at the *Palmarès académique des Olympiades de mathématiques de l'Académie de Paris*, on May 29th, 2013.

M. Kern gave a talk on “Mathematics and Subsurface Water”, as part of the *Promenades mathématiques* program for students in Terminale S and 1ère S, at Lycée Émilie du Châtelet (Serris), on May 22nd, 2013.

## Popix Team

### 9.3. Popularization

We have built a comprehensive online wiki (WikiPopix, <https://wiki.inria.fr/popix>) for the population approach with mixed-effects models. This wiki aims to be an invaluable resource for all pharmacometricians, statisticians, teachers, graduate and undergraduate students in academia, industry and regulatory agencies. It is freely available online for all these communities.

Furthermore, the team developed an online animated film called *Introduction to PK modeling* for interested members of the public and for teaching and training purposes. It can be seen at <https://team.inria.fr/popix/files/2013/02/PKmodelling.swf>, and joins two previous animated films already developed by the team (see <http://team.inria.fr/popix/files/2011/11/PopulationApproach.swf>).



## POTIOC Team

### 8.3. Popularization

The members of Potioc have published several popularization articles targeted to the general public:

- "Quand la réalité virtuelle rencontre les surfaces tactiles" (<http://interstices.info/toucheo>), Interstices [24] (M. Hachet)
- "Arrêtez de regarder la 3D, prenez-en le contrôle !" (<http://www.inriality.fr/informatique/interaction-homme-machine/3d/arretez-de-regarder-la/>), Inriality [23] (M. Hachet)
- "Grâce au numérique, on peut lire dans les pensées" ([https://interstices.info/jcms/nn\\_73094/grace-au-numerique-on-peut-lire-dans-les-pensees](https://interstices.info/jcms/nn_73094/grace-au-numerique-on-peut-lire-dans-les-pensees)), Interstices : Idée reçue [26] (F. Lotte)
- " Interaction Hommes-Machines : une histoire de 30 ans" (<http://www.inriality.fr/informatique/interface-homme-machine/inria/interaction-hommes-machines-une/>), Inriality [25] (M. Hachet)

They gave the following popularization talks:

- "L'activité cérébrale pilote directement l'ordinateur : présentation de l'interface cerveau-ordinateur (Brain-Computer interface)", conférence "Demain les objets sont connectés !", event "Semaine Digitale 2013" in Bordeaux (J. Frey)
- Talk introducing BCI and follow-up debate around augmented human, conférence "L'homme « augmenté » : notre avenir est-il « cyborg » ?", event "Nancy Renaissance 2013" in Nancy (J. Frey)
- "Utiliser son cerveau pour contrôler une machine", Cité des sciences, Paris (F. Lotte)
- "Le cerveau au commandes", conférence as part of the "Cervorama" exhibition, Cap-Sciences, Bordeaux (F. Lotte)
- "Interfaces Cerveau-Ordinateur et Homme Augmenté", conférence "Neurotechnologies: vers un homme augmenté?", Bordeaux (F. Lotte)

They also demonstrated their work to the general public during various events:

- Portes ouvertes Université Bordeaux1, démonstrations de PapARt (J. Laviolle)
- Cap Sciences - expo permanente, PapARt - development (J. Laviolle)
- Cap Sciences - Évènement IHM 2013, démonstration de PapARt (J. Laviolle)
- BCI demo for highschool students following "informatique et sciences du numérique" courses (J. Frey, A. Cellard, F. Lotte)
- BCI demo for the general public during "La nuit des chercheurs" in Talence (F. Lotte, A. Cellard)

Finally, they also participated to the following events

- Aquitec 2013, for promoting research jobs (J. Frey)
- Film-debate, "ExistenZ : faut-il avoir peur de la réalité virtuelle ?", University of Bordeaux 1 (J. Frey)
- Interview for a highschool class for their video project on science (A. Cellard)
- Participation to "visages des sciences 2013" (postcard and video interview) (A. Cellard)
- Interview (video and paper) for the SoNews online journal (local Inria Bordeaux newspaper) (A. Cellard)

## **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 Fair<sup>0</sup> in Grenoble, from 10 to 13 of October 2013.

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

## 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](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](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](http://bit.ly/M3cWCi).

## **PROSECCO Project-Team**

### **9.3. Popularization**

#### **9.3.1. Vulnerability Reports**

- Benjamin Smyth and Alfredo Pironti reported TLS truncation vulnerabilities to Helios, Microsoft, and Google, and presented a talk at BlackHat USA. They were acknowledged in Google's Hall of Fame.
- Karthikeyan Bhargavan and Antoine Delignat-Lavaud reported HTTPS header truncation vulnerabilities in Google Chrome and Apple Safari, resulting in a security update to Google Chrome.
- Karthikeyan Bhargavan and Antoine Delignat-Lavaud reported TLS protocol-level vulnerabilities in Internet Explorer, Google Chrome, and Mozilla Firefox, resulting in security updates to all three.
- Antoine Delignat-Lavaud reported new vulnerabilities in Akamai-hosted websites, resulting in an update to Akamai's web caching network.

**RAP Project-Team (section vide)**

**REALOPT Project-Team (section vide)**

## **REGAL Project-Team**

### **8.3. Popularization**

- Marc Shapiro presented a tutorial on “From strong to eventual consistency: getting it right” at [OPODIS 2014](#).
- Marc Shapiro organized the Dagstuhl workshop on “Consistency in Distributed Systems,” in February 2013 [[24](#)].

**REGULARITY Project-Team (section vide)**



## **REO Project-Team**

### **8.3. Popularization**

- Ayman Moussa
  - Participation at “Fête de la science” at Paris 7

## REVES Project-Team

### 8.3. Popularization

#### 8.3.1. Popularization, Invited Talks

- Adrien Bousseau presented the work on Coherent Intrinsic Images from Photo Collections (SIGGRAPH Asia 2012) in the Research Session of the FMX conference in Stuttgart.
- Adrien Bousseau presented the work on sketching tools for designers as a “Cafe’In” at the Inria Sophia Antipolis center and as an introduction to research for high school students from Nice (MathC2+) and Grasse. This work also appeared as an article on the Inria Sophia Antipolis website <http://www.inria.fr/centre/sophia/actualites/des-outils-informatiques-pour-les-artistes-et-les-createurs>
- Christian Richardt gave invited talks at UC Berkeley, Stanford, Nvidia Research (Santa Clara, California) and TU Berlin (Germany).

#### 8.3.2. Demos

We gave demos (mainly of the immersive space) to high school students, representatives from the planned Museum of Cosquer in Marseille, Sup’Com Tunis, the companies Thales, Thales AleniaSpace and Optis.

#### 8.3.3. Conferences and Invited Talks

- At SIGGRAPH 2013, Adrien Bousseau presented the work on Gloss Perception in Painterly and Cartoon Rendering [14]. Jorge Lopez Moreno also presented our work at the French chapter of SIGGRAPH in Paris. Our work also appeared on the Inria Sophia Antipolis website (<http://www.inria.fr/centre/sophia/actualites/siggraph-2013-trois-equipes-du-centre-presentent-leurs-travaux>).
- Adrien Bousseau and Emmanuel Iarussi attended the ACM CHI conference in Paris (May).
- Adrien Bousseau and Emmanuel Iarussi attended the ACM UIST conference in St Andrews (October) where Emmanuel Iarussi presented the paper on assisting drawing from photographs [19].
- Adrien Bousseau gave a talk on drawing tools for depicting stylized materials at the “Groupe de Travail sur le Rendu” in Paris <http://gtrendu.blogspot.fr/>.
- George Drettakis attended Eurographics 2013 in Girona Spain (May) and EGSR 2013 in Zaragoza Spain (June).
- Gaurav Chaurasia attended Eurographics Symposium on Rendering at Zaragoza (Spain) June 19-21, 2013.
- Gaurav Chaurasia presented the paper “Depth Synthesis and Local Warps for Plausible Image-based Navigation” at SIGGRAPH at Anaheim (CA, USA) between July 21-25, 2013.
- Gaurav Chaurasia gave an invited talk titled “Algorithms and Perception for Interactive Free-Viewpoint Image-Based Navigation” at Microsoft Research Redmond, USA on July 18, 2013. He was hosted by Dr. Eyal Ofek in the Xtreme Computing Group.
- Gaurav Chaurasia visited MIT CSAIL between Aug 1, 2013 and Sept 30, 2013. He was hosted by Prof. Fredo Durand computer graphics group.
- Stefan Popov presented his paper at Eurographics 2013 in Girona, Spain
- Stefan Popov attended the Eurographics Symposium on Rendering 2013 in Zaragoza, Spain
- Christian Richardt attended the Berkeley-Inria-Stanford workshop in Stanford to represent the CRISP associate team.
- Christian Richardt attended Eurographics 2013 in Girona, Spain.
- Christian Richardt attended CVPR 2013 in Portland, Oregon, to present the "Megastereo" paper.

- Christian Richardt attended SIGGRAPH 2013 in Anaheim, California, and co-presented a paper with Peter Vangorp (Perception of Perspective Distortions in IBR).
- Emmanuel Iarussi participated in the ACM CHI Conference on Human Factors in Computing Systems. Paris, France - 27 April, 2 May 2013, and in the ACM Symposium on User Interface Software and Technology (UIST), St Andrews, UK, October 8-11, 2013.
- Sylvain Duchêne attended Siggraph Conference 2013 in Anaheim, USA, 18 hours Inria class on Computational Geometry Learning from David Cohen-Steiner, and university english course LAN02.

## RMOD Project-Team

### 9.3. Popularization

- Marcus Denker gave a presentation about Pharo at the open source conference FOSDEM 2013.
- *Web with Pharo* Conference was held 6 June 2013 @ Euratechnologies, Lille.
- Camille Teruel and Damien Cassou gave a Pharo tutorial at ECOOP 2013 Montpellier. Slides got >16000 hits after a mention on ycombinator news (<http://www.lirmm.fr/ecoop13/?id=158#tutorial13>)
- *RIC Day* was held 2 October 2013 @ University of Lille 1, Lille, Anne Etien gave a presentation about Moose and software maintenance.
- Tutorials at ESUG 2013, Annecy, France in September.
- Esteban Lorenzano and Guillermo Polito gave multiple Presentations at Smalltalks 2013 (Argentina):
- Guillermo Polito gave a lecture about *Pharo Ninja Tricks* at Universidad de Quilmes / Argentina in November (a hands-on showing how to use the IDE and explore the system, open classes, extension methods...).
- Marcus Denker gave a lecture and a public talk at *Universitat Politecnica de Catalunya*, Barcelona, Spain.
- Software Maintenance Courses (Nicolas Anquetil):
  - IJDs Inria Lille Nord Europe, with Guillaume Larcheveque, 1 day
  - Thales, 1 day
- Stéphane Ducasse gave multiple lectures and talks at University of Prag in December 2013.
- Organization of the MooseDay in Lille on the 19th December with around 25 persons from all around the world. (<http://www.lifl.fr/~etien/MooseDay.html>).
- Multiple public Pharo Sprints in Lille, Santiago/Chile, Buenos Aires/Argentina and other places.

**ROMA Team (section vide)**

## **RUNTIME Project-Team**

### **9.3. Popularization**

Brice GOGLIN is in charge of the diffusion of the scientific culture for the Inria Research Center of Bordeaux. He is also a member of the national Inria committee on Scientific Mediation. He gave numerous talks about high performance computing and research careers to general public audience and school student, as well as several radio and paper interviews about Inria's activities.

Brice GOGLIN and Bertrand PUTIGNY wrote two popularization papers about High-Performance Computing in the Interstices online journal.

Brice GOGLIN and François TESSIER presented research careers at the Aquitec student exhibition.

Paul-Antoine ARRAS, Sylvain HENRY, Bertrand PUTIGNY and François TESSIER gave a hands-on introduction to programming to 30 teenagers at the *Fete de la Science*. Brice GOGLIN was in charge of a numeric science popularization game during that same event.

Samuel THIBAULT presented his research work in a local elementary school.

## SAGE Project-Team

### 9.3. Popularization

- J. Erhel participated in the Inria workshop on scientific popularization, Paris, January 2013.
- J. Erhel participated in the Mathematics of Planet Earth Day at UNESCO, Paris, March 2013.
- J. Erhel gave a talk entitled "la terre se met aux maths", during the week of maths, at lycée Victor and H el ene Basch, Rennes, in March 2013 [59]. See <http://www.irisa.fr/sage/jocelyne>
- J. Erhel participated in the panel on "Observer et mesurer la terre", Rencontres CNRS Jeunes Sciences et Citoyens, Ile de France, March 2013 See <http://www.scienceouverte.fr/Rencontres-CNRS-Jeunes-Sciences-et,413> and <http://www.scienceouverte.fr/-Divers-voyages-> [58]
- J. Erhel was invited to "congr es des jeunes chercheurs", at ISFEC Bretagne, Rennes, April 2013
- J. Erhel gave a talk with F. Tort (ENS Cachan) entitled "L'informatique, c'est pas pour les filles", at the salon "Educat ec-Educative", Paris, November 2013.
- J. Erhel coordinated with C. Leininger the journal TDC no 1062 "les math ematiques de la terre", october 2013. See <http://www.cndp.fr/tdc/tous-les-numeros/les-mathematiques-de-la-terre.html>
- B. Philippe wrote a review on TDC no 1062. See <http://www.interstices.info>.
- J. Erhel wrote a document entitled "sur les traces des polluants", in TDC no 1062 [57].
- J. Erhel wrote a paper entitled "Le Jour d'apr es : vers une r eflexion sur les mod eles climatiques ", in Interstices [56]
- J. Erhel wrote two texts in the blog mpt2013: "Henry Darcy et sa loi" [54] and "La diffusion, un moteur universel" [55].
- B. Philippe wrote a text in the blog mpt2013: "La terre a du potentiel" [61] See <http://mpt2013.fr/>.

## **SCIPORT Team**

### **8.3. Popularization**

- Laurent Hascoët gave a presentation on adjoint Automatic Differentiation at the AboutFlow meeting in Tinos (Greece), may 27-31.
- Laurent Hascoët made a detailed presentation of Automatic Differentiation at Microsoft Research labs in Cambridge (UK) on december 6th.



**SCORE Team (section vide)**

**SECRET Project-Team (section vide)**

## SECSI Project-Team

### 8.3. Popularization

- Stéphanie Delaune, member of the scientific mediation committee at Inria Saclay. (“Mediation” is the new name for popularization.)
- Rémy Chrétien and Stéphanie Delaune, *La protection des informations sensibles*, article in *Pour La Science*, Nov. 2013.

## **SELECT Project-Team**

### **9.3. Popularization**

Erwan Le Pennec takes care of a Math en Jeans group at lycée Joliot Curie from Nanterre.

## SÉMAGRAMME Project-Team

### 8.3. Popularization

- Maxime Amblard is member of editorial board of *interstices* (i), a french virtual revue of popularization for computer science : <http://interstices.info>.
- Maxime Amblard published an article which summarizes the main questions of natural language processing for (i) : [https://interstices.info/jcms/ni\\_74169/real-humans-des-machines-qui-parlent-comme-des-hommes-ou-presque](https://interstices.info/jcms/ni_74169/real-humans-des-machines-qui-parlent-comme-des-hommes-ou-presque).
- Maxime Amblard was organizer of the exhibition *Proj'SC*, about master student's works for the University library, January 2013.

## SequeL Project-Team

### 9.3. Popularization

- “Small or big (data), make it sequentially!”, J. Mary, Ph. Preux, invited talk at Euratechnologies, March 2013.
- Inria publishes an article about Face Recognition, Michal Valko, <http://www.inria.fr/centre/lille/actualites/intel-collabore-avec-inria>, March 2013
- Jérémie Mary highlighted on TV and on Inria website: you are how you browse: <http://www.inria.fr/en/centre/lille/news/you-are-how-you-browse>, Dec. 2013

**SERPICO Project-Team (section vide)**

## SHACRA Project-Team

### 9.3. Popularization

#### 9.3.1. *Fête de la Science*

Christian Duriez has been involved as a *Wandering Researcher* in the Fête de la science (french event that promotes science).

#### 9.3.2. *Exhibitions*

Christian Duriez and Mario Sanz Lopez have been involved in the design and development of scientific and technological demonstrators for the *Plateau* (e.g. Showroom) Inria at Euratechnologies and for *The Labo* at Inria test laboratory.

#### 9.3.3. *Recontre Inria-Industrie 2013*

This was a public event taking place in Paris the 11th of June 2013. The new training system dedicated to electrocardiology and the recent deformable robot was presented.

#### 9.3.4. *IHU Scientific Days*

At the occasion of the IHU Scientific days, we visited the IHU Strasbourg and several talks were done by members of the team: Alexandre Bilger, Stéphane Cotin, Jeremie Dequidt, Nazim Haouchine, Igor Peterlik, and Hugo Talbot.

#### 9.3.5. *Intergovernmental seminar*

The intergovernmental seminar on digital sciences was held in february at the University of Cergy-Pontoise. Within this context, the team has exhibited a demonstration of a cataract surgery simulator which is dedicated to train surgeons to a new cost-effective cataract surgery procedure MSICS (*manual small incision cataract surgery*). This simulator was developed at Inria and has been transferred to the start-up InSimo.



## **SIERRA Project-Team**

### **9.3. Popularization**

- A. d'Aspremont, Journée Big Data, ENSAI, Rennes, November 2013.

## **SIMPAF Project-Team**

### **9.3. Popularization**

C. Calgaro is in charge of the communication of "Laboratoire Paul Painlevé" and she is in charge of the relation between the University of Lille and high schools. Accordingly, she organizes various events like « Les Mathématiques itinérantes » and « Stage de seconde à contenu scientifique ». With the help of the Communication Department of Inria, C. Calgaro, E. Creusé and T. Goudon produced a documentary fiction (in French) for a general audience on how research in applied mathematics is being done. The title is "Avis de recherche" (see <http://www.inria.fr/avisderecherche>).

## **SIROCCO Project-Team**

### **9.4. Popularization**

- L. Guillo is advisor of secondary school pupils following the course "Informatique et Science du Numérique (ISN)" of the Lycée Jean Macé in Rennes, France.

## **SISYPHE Project-Team**

### **9.3. Popularization**

The high profile publications in *Nature* and *Science* are popularizing the new field of quantum engineering.

## **SMIS Project-Team**

### **9.3. Popularization**

- "Comment préserver l'anonymat", Pour la Science, n° 433, novembre 2013.
- "Bases de données en Classe Préparatoire", séminaire à Luminy, mai 2013.
- Tutorial on experimental methodology at the BDA summer school 2014 "Masses de données distribuées".
- Participation to the "Futur en Seine" event in Paris: <http://web-tech.fr/linria-nous-devoile-ses-recherches-sur-les-smart-cities/>
- "Une nouvelle approche de la protection de nos données", My Science Work, July 8, 2013, by Abby Tabor <http://www.mysciencework.com/news/10335/une-nouvelle-approche-de-la-protection-de-nos-donnees>

**SOCRATE Project-Team (section vide)**

**SPADES Team (section vide)**

## Specfun Team

### 9.3. Popularization

- A. Mahboubi has given a lecture to laureates of the *Olympiades académiques de mathématiques, académie de Créteil*.  
<http://maths.ac-creteil.fr/spip/spip.php?article463>.
- A. Mahboubi has been involved in the scientific committee for the elaboration of the board game *Mémoire Vive* produced by the Inria communication services.
- A. Mahboubi has given a talk at the forum STIC Paris-Saclay (Palaiseau, France) in November 2013.



## **STARS Project-Team**

### **9.3. Popularization**

- François Brémond participated in ERCIM News 95, Special theme: "Image Understanding", Sept 2013;
- François Brémond was interviewed by magazine 01net/itv Jul 2013;
- François Brémond was interviewed on Autisme by Monaco Info TV, September 2013;
- François Brémond gave a talk at Forum de la Recherche, Nice, 22 November 2013;
- Guillaume Charpiat is part of the MASTIC committee;
- Guillaume Charpiat wrote with Yuliya Tarabalka a popularization article about wild fire mapping from satellite images in the magazine Earthzine : <http://www.earthzine.org/2013/09/16/exploiting-temporal-coherence-for-fire-mapping-from-modis-spaceborne-observations/> [53].

## **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”).

## **SUMO Team**

### **9.3. Popularization**

**Loïc Hérouët** contributed to a visit of young pupils (3e) visiting IRISA to discover a research environment in February 2012. He did a short interactive presentation (1 hour) of his research theme, and of the duties of a researcher.

**Éric Fabre** gave a survey presentation about failure diagnosis in telecommunication networks to the 2nd year students of ENST Bretagne (Brest) engaged in a research training track. This was followed by informal discussions about the every day life of a researcher.

## TAO Project-Team

### 9.3. Popularization

- Michèle Sebag is interviewed at the *Palais de la Découverte* about Artificial Intelligence, and the video, by "Société de production Stand Alone Media", is visible on YouTube at <http://www.youtube.com/watch?v=uEW32KikKJ8>; talk in "Questions de science et enjeux citoyens" (QSEC), opération culturelle de la région Île-de-France (Ulm, May 2013);
- Yann Ollivier co-organized a bi-monthly math seminar for undergrad students on Saturdays at Institut Henri Poincaré, with 100+ participants at each session.
- Yann Ollivier takes part in the organization of the European Union Contest for Young Scientists (science fair for high school students from 30+ countries organized by the European Commission).
- Yann Ollivier was part of the scientific steering committee for the booklet *L'explosion des mathématiques* presenting a wide range of applications of mathematics, edited by the SMF and SMAI (planned diffusion: 10,000–20,000 copies).

## TASC Project-Team

### 9.3. Popularization

- Within the context of the **global constraint catalog**:
  - we provide more exercises (up to 55 currently) with their solution and a web version allowing some interaction will be available in spring 2014.
  - the effort for converting and completing the 900 figures of the catalog using **TikZ** has been continued up to a point where beginning 2014 only 150 figures need still to be converted.
- Within the context of the library **IBEX** the following courses were given:
  - A workshop in June and December 2013 in Brest (ENSTA).
  - A user oriented course in July 2013 at the doctoral days of the GDR Macs in Strasbourg.
  - A developer oriented course *IBEX days* in October 2013 in Paris (Ecole des Ponts, Paritech).
- At the 2013 edition of the Fête de la Science (Nantes University):
  - Two talks on *Artificial Intelligence and real time strategy games* were given by Florian Richoux.
  - One talk on *Challenges around optimizations problems* was given by Xavier Lorca.
  - One half day discussing and answering questions around the work of professor and researcher in computer science with young persons (17 years old) was spent by Nicolas Beldiceanu.

## **TEXMEX Project-Team**

### **9.3. Popularization**

- Guillaume Gravier, Patrick Gros and Hervé Jégou: Invited talks at INA, January 2013
- Guillaume Gravier: Invited speaker at Séminaire Délégation Générale pour l'Armement, Paris
- Guillaume Gravier: Invited talk at PUC Minas, Brazil, April 2013
- Guillaume Gravier: Seminar on Speech and Audio Processing, M. Sc. Students, INSA Rennes, France
- Patrick Gros and Pascale Sébillot: Invited speakers at the workshop on Big Data, ENSAI, Rennes, France, November 2013.
- Guillaume Gravier: Invited speaker at Colloquium Rennais des Sciences du numérique, Rennes
- Hervé Jégou: Invited talk at Universita Autonoma de Barcelona, January 2013
- Hervé Jégou: Invited talk at University of Caen, January 2013
- Hervé Jégou: Invited talk at Oxford University, Visual Geometry Group, UK, November 2013

## **TITANE Team**

### **9.4. Popularization**

Florent Lafarge gave talks to high school students on city modeling (Lycee Tocqueville, Lycee De La Montagne, and Stage MathC2+). He is a member of the editorial board of LISA (Inria SAM newsletter).

**TOCCATA Team**



## **TOSCA Project-Team**

### **9.3. Popularization**

- M. Bossy contributed as a Guest Blogger on the Mathematics of Planet Earth 2013 web site.
- D. Talay gave lectures to scholars in Nice.

**TRIO Team (section vide)**

**TRISKELL Project-Team (section vide)**

## **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.

## 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.

## **VEGAS Project-Team**

### **7.3. Popularization**

Guillaume Moroz: Member of the organizing committee of the *Olympiades académiques de mathématiques*.

## **VERIDIS Project-Team**

### **9.3. Popularization**

Marie Dufлот-Kremer, Pascal Fontaine, and Stephan Merz presented some of the subjects and techniques that underly formal verification of protocols and algorithms at events like “Fête de la Science”. Using wooden puzzles, Sudoku sheets or boxes with locks, they explained how real-life problems can be represented in logical form and then solved using automated tools based on formal logic.

Marie Dufлот-Kremer presented exercise sessions for high school students on “conducting a police investigation using databases” and “discovering Turing machines with Lego bricks”. She is also a member of the steering committee preparing an itinerant exposition intended for explaining computer science to high-school students.

Thomas Sturm, Uwe Waldmann, and Christoph Weidenbach are involved in the “Computer Science Research Days” which take place every year. Gifted students from all over Germany can actively participate in current research themes within the Max Planck Institute for Informatics, the Computer Science Department of Saarland University and the German Research Center for Artificial Intelligence. The goal is to fill young people with enthusiasm for the subject of computer science as well as to discover and support the development of new talent.

## **VIRTUAL PLANTS Project-Team**

### **7.3. Popularization**

Christophe Godin gave 3 conferences for high-school pupils respectively on plants and fractals and on the Secret Code of Flowers in the context of MathC2+ and fête de la science (6h).



**VISAGES Project-Team**

## **WILLOW Project-Team**

### **9.5. Popularization**

- J. Ponce participated in the iMatch meeting at Futur en Seine, June 2013
- J. Sivic participated in the CityLabs@Inria presentation at Futur en Seine, June 2013

## WIMMICS Project-Team

### 9.3. Popularization

**Julien Cojan** presented *DBpedia: Wikipédia pour les machines* at café-in seminar, Inria Sophia Antipolis, June 27,<sup>0</sup>

**Fabien Gandon:**

*Le Web sémantique comment ça marche ?*, Mines d'Alès, Nîmes, Communication science et société, February 12.

*Web sémantique: ou comment se déploient sur le Web les données liées et la sémantique de leurs schémas*, Total, February 27.

*Le Web de Demain*, médiation scientifique, Lycée Guillaume Apollinaire Nice, March 26.

*Le Web Sémantique*, interview Graphemeride, April 15.

*Le Web sémantique*, Sophia/Metropole Mag, June.

*Web de données et Web sémantique, ressources ubiquitaires pour nos villes et territoires* Innovative City Convention, June 18-19.

*Web: terra incognita*, Nuit des chercheurs, Alès, September 27.

Interview for the magazine *Documentaliste SI* Doc-SI n°3-2013 Webinaire *Roger Pédaque II*, October 10.

**Maxime Lefrançois** participated to the Science Festival - October 10th to 14th, 2012 - with the Association des Jeunes Chercheurs des Alpes Maritimes (AJC06). He conceived and animated scientific experiences on different energy sources.

We welcomed a scholar for a visit of one week, December 16-20.

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<sup>0</sup><https://project.inria.fr/mastic/cafe-in-27-juin-wikipedia-pour-les-machines/>

## ZENITH Project-Team

### 9.3. Popularization

Zenith participated to the following events in France:

- “La fête de la science” (Montpellier), with the animation of a stand at Genopolys (a science village). We received 7 groups from Oct. 10 to Oct. 11, and then a wider audience on Oct. 12. With this stand, we have participated in the effort of relaunching LIRMM’s activities for this major event in science popularization.
- “Futur en Seine 2013” (Paris, <http://www.futur-en-seine.fr/fens2013/>) with the co-animation of the stand for the presentation of Interstices’ activities.
- annual seminar of the “mecsci” workgroup of Inria, Paris (CNAM) on January 30 and 31 [47].

F. Masegla is a member of the editorial committee, and contributor, of interstices ( <https://interstices.info>), and a member of the scientific committee for the edition of “Datagramme”, the game from Inria on science popularization. He has given a 3 days training to elementary school teachers. This event, called “Graines de sciences” (Ecole de Physique des Houches, <http://www.fondation-lamap.org/fr/graines-de-sciences>) was funded by “La main à la pâte” (<http://www.fondation-lamap.org/>), a French foundation dedicated to science popularization based on manual activities. The goal, here, was to give a 3h training to groups of a dozen of teachers, by mainly using games and activities they would be able to transfer in their classrooms.

A. Joly presented the Pl@ntNet project and the resulting iPhone application in several events including the "Salon de l’agriculture 2013", "Les assises de la biodiversité", "Journée thématique du CNRS autour des usages mobiles de l’information scientifique dans l’Enseignement Supérieur et la Recherche", "Rencontres Agropolis", "journée des nouveaux arrivants de l’Inria", "journées INRA/Inria", etc. Many news media articles, blogs, TV news and twitts also reported on Pl@ntNet (typing "Pl@ntNet" on Google is the best way to get most of them). Finally a movie was realized in collaboration with Interstices ( <sup>0</sup>).

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<sup>0</sup><http://videotheque.inria.fr/videotheque/media/browse/2>