



RESEARCH CENTER
Bordeaux - Sud-Ouest

FIELD

Activity Report 2013

Section Popularization

Edition: 2015-04-10

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ALEA Project-Team (section vide)

BACCHUS 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].

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.

CEPAGE Project-Team (section vide)

CONCHA Project-Team

9.3. Popularization

CQFD Project-Team

9.3. Popularization

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

FLOWERS Project-Team

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 ?”.

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.

LFANT Project-Team (section vide)

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.

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.

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

MC2 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).

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

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), 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)

REALOPT Project-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.