



RESEARCH CENTER  
**Rennes - Bretagne-Atlantique**

FIELD

Activity Report 2016

# Section Popularization

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

## **CELTIQUE Project-Team**

### **6.3. Popularization**

Talk “Bug, Virus, Intrusion, Pirates... So many threats and no defense? Yes... maths.”, Thomas Genet, given three times in high schools close to Rennes.

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

## **PACAP Project-Team**

### **10.3. Popularization**

Erven Rohou discussed the research axes of the team in the “émergences” newsletter [http://emergences.inria.fr/2016/newsletter\\_n43/L42-PACAP](http://emergences.inria.fr/2016/newsletter_n43/L42-PACAP).

Nicolas Kiss, Damien Hardy and Erven Rohou presented a poster at the “Rencontres inter-UMRs-DGA”, of the “Pôle d’excellence Cyber”.

Erven Rohou and Isabelle Puaut presented a poster (with ANR W-SEPT colleagues) at “Les rencontres du numérique de l’ANR”.

## **SUMO Project-Team**

### **10.3. Popularization**

Nathalie Bertrand gave an introductory talk on graph theory and its use to solve practical problems, to grad school students following the ISN (Introduction aux Sciences du Numérique) courses.



## **TAMIS Team**

### **10.3. Popularization**

- Vulnerability Prediction Against Fault Attacks , N. Jafri, A. Legay, J.-L. Lanet, Ercim news 106, 2016
- Skyfall : Tombé du ciel, J.-L. Lanet, Interstices, 2016 In this publication we revisit the movie Skyfall and explain on which scientific background rely some elements of the movie.
- FIC 2016 Internet des objets : la nouvelle fragilité ? We have been invited to participate at a panel with layers, IoT designer to discuss the security of the IoT.
- Atlantico, Et si les objets connectés étaient la plus grande faille qu'entreprises et particuliers pouvaient offrir aux hackers ? January 2016. In this interview we explain that the security is not the main concern of low end IoT, which is not the case with high end IoT.

## **TASC Project-Team**

### **10.3. Popularization**

- Maintenance of the global constraint catalogue.
- Illustrations of the volume II of the global constraint catalogue: 2000 figures.

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

**ANJA Team (section vide)**

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

## **I4S Project-Team**

### **10.3. Popularization**

J. Dumoulin was in charge of hybrid/solar road that was demonstrated at COP21 and COP22.

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

## DYLISS Project-Team

### 9.3. Popularization

- *Organization of Sciences en Cour[t]s*. Since 2007, Sciences en Cour[t]s is a project of Nicomaque organization, the association of PhD and PhD students of Brittany. It is a popularization Festival where PhD students explain their thesis via short films of 5min. The goal is to present their scientific researches to the general public. Every year, PhD students of Inria/IRISA join the organization or make movies.[*J. Coquet (coordinator of the festival), V. Delannée (president of Nicomaque), A. Antoine-Lorquin (organizer of the festival)*] [[more info](#)].
- *Production of Sciences en Cour[t]s film*. "Une petite histoire de symbiose(s)" .[*C. Frioux*] [[more info](#)].
- *Bioinfo-fr.net* Bioinfo-fr.net is a french web site where researchers, engineers and students talks about bioinformatics. We have written or contributed to 3 articles for this web site on diverse subjects: "Remise des diplômes du master BIG (Rennes)", "Les dev' jam c'est bon pour vous !", "Ecrire son parseur à la main: chroniques d'une mauvaise bonne idée". [*L Bourneuf, O. Dameron*]. [[more info](#)].



## **FLUMINANCE Project-Team**

### **9.3. Popularization**

Jocelyne Erhel

- présidente du jury du rallye de mathématiques du CNED, 2016.
- talk at day "au coeur des maths, enfermement ou liberté ?", LVN, May 2016.
- scientific responsible of the scientific culture web journal "Interstice" (<https://interstices.info/>)

Dominique Heitz

- Interview dans L'Usine Nouvelle, No 3479, pp. 30-31, 2016

## **GENSCALE Project-Team**

### **10.3. Popularization**

- Operation "A la découverte de la recherche" [P. Peterlongo]

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

## **VISAGES Project-Team**

### **10.3. Popularization**

- Inria demonstration stand, Journées Françaises de Radiologie.

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

## **ASCOLA Project-Team**

### **10.3. Popularization**

- A. Lebre has been invited to the CargoDays event (Nantes).

## CIDRE Project-Team

### 10.3. Popularization

Emmanuelle Anceaume was interviewed on the topic « Blockchain : comment le bitcoin révolutionne l'économie numérique ? » in a broadcast of "le labo des savoirs" (<http://labodessavoirs.fr/emissions-du-labo/>).

Guillaume Piolle has participated to the scientific popularization program *à la découverte de la recherche* aimed at secondary education pupils. His participation consisted in presentations about the objectives, methods and results of research activities in computer security and privacy (including, but not limited to our activities in CIDRE). It took place in high schools in Redon, Cesson-Sévigné and Dol-de-Bretagne.

Valérie Viet Triem Tong participates to (the stand and demo of) the 8h International Forum of CyberSecurity (FIC 2016).

Valérie Viet Triem Tong has published in Interstice a paper entitled "Lutter contre les codes malveillants" ([https://interstices.info/jcms/p\\_91111/lutter-contre-les-codes-malveillants](https://interstices.info/jcms/p_91111/lutter-contre-les-codes-malveillants)).

## **DIONYSOS Project-Team**

### **10.3. Popularization**

- P. Maillé and B. Tuffin responded to the public consultation on draft BEREC Guidelines on implementation of net neutrality rules. 2016.
- G. Rubino makes regular presentations to high school students about the research work in general, and specific technical topics in particular. Current talks:
  - Randomness as a tool
  - Internet as a research problem
  - Great challenges in maths: the Riemann Hypothesis
  - Great challenges in math/computer science: the “P versus NP” problem



## DIVERSE Project-Team

### 9.3. Popularization

- IT industry forums. Our recent work on diversity against browser fingerprinting and the associated web site <sup>0</sup> have been demonstrated in the a major cybersecurity forum (FIC'15 <sup>0</sup>), the largest IT event organized by the European commission (ICT'15 <sup>0</sup>) and two open source forums (OWF'14 <sup>0</sup> and FOSSA'14 <sup>0</sup>).
- General-audience press. Our work on browser fingerprinting has been featured Le Monde <sup>0</sup>, and two full articles appeared in the MISC <sup>0</sup> and the Clubic magazines <sup>0</sup>.

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<sup>0</sup><https://amiunique.org/>

<sup>0</sup><https://fic2015.com/home/>

<sup>0</sup><https://ec.europa.eu/digital-single-market/en/ict2015>

<sup>0</sup><http://www.openworldforum.paris/>

<sup>0</sup><https://fossa.inria.fr/>

<sup>0</sup>[http://abonnes.lemonde.fr/sciences/article/2014/11/24/le-fossa-bazar-techno-participatif\\_4528568\\_1650684.html](http://abonnes.lemonde.fr/sciences/article/2014/11/24/le-fossa-bazar-techno-participatif_4528568_1650684.html)

<sup>0</sup><http://connect.ed-diamond.com/MISC/MISC-081/Le-fingerprinting-une-nouvelle-technique-de-tracage>

<sup>0</sup><http://pro.clubic.com/webmarketing/publicite-en-ligne/actualite-742853-fingerprinting-cookies.html>

## **KERDATA Project-Team**

### **10.3. Popularization**

Luc Bougé:

Master Program, Rennes. Invited presentation to the M2 students about *Informatics as a scientific activity: Toward a responsible research* (December 2016).

Alexandru Costan:

Master Program, Rennes. Invited presentation to the M2 students about *Big Data Analytics* (November 2016).

## MYRIADS Project-Team

### 10.3. Popularization

- Martin Quinson is a scientific expert in a teaching manual of Computer Science for primary schools, authored within the "La main à la pâte" popularization network. This manual was released this summer.
- Martin Quinson co-founded a working group of the Société Informatique de France toward the creation of new unplugged activities to teach the informatics to pupils. This group met twice in Lyon this year, in April and November.
- Martin Quinson participated and co-organized to several workshops and open events where high-school students were invited to discover Computer Science (March at ENS Rennes, November on the Beaulieu campus). He was a scientific expert to the MathC2+ event at ENS-Rennes in June.
- Martin Quinson participated to the full day meeting "Splash Education" targeting at determining the fundamental programming concepts that should be taught to every pupils, co-located with the SPLASH conference <http://2016.splashcon.org/track/splash-2016-splash-e>. He organized the 3-days event on instrumented teaching of computer science, co-located with the Orphee-RDV event <https://apprentissageinstrumentdelinformatique.wordpress.com/>.
- Martin Quinson continued the development of the PLM web platform, which is an exerciser to teach programming to beginners. He also submitted several project applications to pursue this work in the future. Unfortunately, none of these applications have been accepted so far. Prof Peter Hubwieser (Technical University of Munchen, chair of didactics of Computer Science) visited us for two weeks in November. Developing the PLM and exploiting the data already gathered were central elements of this work meeting. A joint publication is currently prepared, targeting the ItiCSE'17 conference.

## TACOMA Team

### 9.3. Popularization

- Invited talk at the Telecom ParisTalks on "De la voiture connectée à la voiture autonome", "Le véhicule autonome, un véhicule ultra-communicant", March 2016, Paris, France, JM. Bonnin
- Invited talk at the A3C7 public event: "L'automobile intelligente et communicante: Carminat, GPS et demain?", "L'automobile communicante dans la ville", June 2016, Cesson-Sévigné, France, JM. Bonnin
- Invited talk at the workshop "Atelier Cybercriminalité dans les transports - Véhicule autonome et transport connecté : quelles stratégies de fiabilité et de sécurité ?", "Sécurité des Communications pour les ITS", June 2016, Angers, France, JM. Bonnin
- "Les véhicules autonomes seront communicants?", Revue TELECOM 182, Oct 2016, JM. Bonnin
- Special issue TPC for Revue TEC mobilité intelligente : "Routes & Véhicules : Quelles Connexions ?", Nov 2016, JM. Bonnin
- "Standards et ITS : vers un écosystème ouvert ?", Revue TEC Mobilité intelligente, Nov 2016, JM. Bonnin
- "Quand les modes de vie actuels façonnent l'habitat du futur", Site Internet Batiactu, Jan 2016, <http://www.batiactu.com/edito/quand-modes-vie-actuels-faconnent-habitat-futur-43438.php>
- Invited talk "Le logement évolutif, Michele Dominici", Matin de l'aura angevine, Jan 2016, Angers
- Cardinal Edifice imagine l'habitat de demain, Communiqué de presse de Cardinal, relayé sur le site Batinfo, Jan 2016. [http://batinfo.com/actualite/cardinal-edifice-imagine-lhabitat-de-demain\\_4339](http://batinfo.com/actualite/cardinal-edifice-imagine-lhabitat-de-demain_4339)
- Invited talk "Ville et Habitat intelligent : des innovations au service du vivre-ensemble ?", Michele Dominici, Feb 2016, La Friche la Belle de Mai, Marseille
- "Place au logement caméléon - freemium" - Métiers. LeMoniteur, 1 mars 2016. <http://www.lemoniteur.fr/articles/place-au-logement-cameleon-31516795>
- Invited talk "L'habitat d'hier, d'aujourd'hui et de demain, intervention de Michele Dominici", Apr 2016 dans le cadre du Printemps du Développement Durable, Langueux
- Ecole d'été "Ecologie et biens communs", Université de Bretagne Occidentale, Sept 2016, Michele Dominici

## HYBRID Project-Team

### 10.3. Popularization

The team has organized, together with MimeTIC team, a press conference and a press release on the "6-Finger Illusion" in May 2016. This event has been followed by lots of articles (internet, press) and radio coverages, including: France Inter, RFI, Europe 1, Le Monde, Libération, Les Echos, etc.

In addition, the results of the team have been disseminated in several other media coverages in 2016:

- "Journal télévisé 20h" (National prime time news), France2 channel (02/16) : presentation of the BCI activity.
- "Journal télévisé du soir", TVRennes channel (04/16) : presentation of the Forum Eurocities visit in Immersia.
- "La tête au carré", France Inter radio (10/16) : participation of Anatole Lécuyer.

The team has also participated to numerous dissemination events in 2016 (chronological order):

- "Open House ISTIC 2016" (Rennes, 01/16) : booth and demos of the team.
- "Forum EuroCities" (Rennes, 04/16) : presentation from Ronan Gaugne and demos in Immersia.
- "Les 10 ans du Quai Branly" (Paris, "Quai Branly" Museum, 06/16) : talk from Valérie Gouranton and Ronan Gaugne on virtual archaeology.
- "French-American Doctorat Exchange program 2016" (Rennes, 07/16): presentation from Ferran Argelaguet on Hybrid activities.
- "Journées du Patrimoine 2016" (Rennes, "Champs Libres" Museum, 09/16) : demos related to virtual archaeology.
- "Journées Science et Musique 2016" (Rennes, 10/16) : co-organization of this event, and presentation of several demos.
- "Nuit Art et Science 2016" (Brest, 10/16) : demo on musical composition history in virtual reality and Immersia.
- "NEUROPLANETE 2016" (Nice, 10/16) : talk from Anatole Lécuyer and dissemination in "Le Point" journal.
- "Rencontres Inria Industrie: Interactions avec les objets et services numériques" (Lille, 11/16): demonstration from Ferran Argelaguet.

## **LACODAM Team**

### **10.3. Popularization**

M.-O. Cordier is editorial board member of Interstices webzine.

## LAGADIC Project-Team

### 10.3. Popularization

- Due to the visibility of our experimental platforms, the team is often requested 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, grasping and dual arm manipulation by Romeo, vision-based shared control using our haptic device for object manipulation, the control of a fleet of quadrotors, vision-based detection and tracking for space navigation in a rendezvous context, the semi-autonomous navigation of a wheelchair, and augmented reality applications. Some of these demonstrations are available as videos on VispTeam YouTube channel (<https://www.youtube.com/user/VispTeam/videos>). This year there were among others, demonstrations organized for the HCERES expert committee that evaluated IRISA, about twenty people affiliated to the CNRS electronics network, students of the “Innovation et entrepreneuriat” Master, those of the L3 R&I at ENS Rennes, about twenty students from the “Ecole des Mines de Nancy”, several classes of high school students around Rennes, without forgetting the members of the Ph.D. thesis juries.
- Fabien Spindler and Giovanni Claudio were interviewed by TV Rennes about Pepper robot (<https://www.facebook.com/166100743494694/videos/vb.166100743494694/959489554155805/?type=2&theater>).
- Marie Babel participated to “15<sup>e</sup> Journée nationale des pôles de compétitivité” in March 2016 (Paris): HandiViz project was selected by the French Ministry of Finance
- Marie Babel participated to the Science Festival in October 2016 with an interview at “Village des Sciences” and a workshop for general public organized in Acigné near Rennes.
- Marie Babel participated to the “Convention Nationale des SATT” (October 2016, Paris).
- Marie Babel gave a talk on "HandiViz: a new driving experience" in October 2016, during the “Semaine des Technologies - Robotique et santé” organized at Insa Rennes.
- Vincent Drevelle participated to the “Journée science et musique” in Rennes, with an interactive demonstration of sound-based tracking of a micro aerial vehicle with a beam projector (in cooperation with the Panama team).
- An article related to the research activity of Alexandre Krupa on robotic needle steering entitled “Un robot qui apprend à viser” has been published in March 2016 in the general-audience magazine “Sciences Ouest”: <http://www.espace-sciences.org/sciences-ouest/340/dossier/un-robot-qui-apprend-a-viser>.
- Paolo Robuffo Giordano has given press releases on the activities involving formation control for multiple quadrotor UAVs to Émergences Inria, Sciences Ouest, and “Industrie & Technologies”.

## **LINKMEDIA Project-Team**

### **10.3. Popularization**

Vincent Claveau

An article entitled 'Vélos, bicyclettes et moteur de recherche', was published by ACFAS on its website

An article entitled 'Détecter l'intox sur Twitter' was published in a special issue of the Dossiers de l'Université de Rennes 1



## **MIMETIC Project-Team**

### **10.3. Popularization**

Franck Multon managed a 4 days Booth to present ergonomic work in MIDEEST in Paris, with a plenary session conference about penibility at work, MIDEEST December 2016

Franck Multon and Richard Kulpa managed a 2 days Inria Booth to present VR and Sports in Futur en Seine in Paris, June 2016

Ludovic Hoyet, Journées Scientifiques Inria 2016, exposé court en 180s, “Perceptual Effect of Shoulder Motions on Crowd Animations”.

Ludovic Hoyet, Press conference, « Six-Finger Illusion : pour mieux comprendre la perception de notre corps et de notre avatar ». With Ferran Argelaguet and Anatole Lécuyer, Inria, Paris, 12 May 2016, <https://www.inria.fr/centre/rennes/actualites/six-finger-illusion>

## PANAMA Project-Team

### 10.3. Popularization

#### 10.3.1. *Journée Science et Musique*

**Participants:** Antoine Deleforge, Rémi Gribonval, Frédéric Bimbot, Romain Lebarbenchon, Adrien Leman, Nicolas Bellot, Clément Gaultier, Nancy Bertin, Nicolas Keriven, Ewen Camberlein, Luc Le Magoarou, Armelle Mozziconacci, Stéphanie Lemaile, Corentin Louboutin, Nicolas Tremblay, Corentin Guichaoua, Srdan Kitic.

*with contributions and support from: Valérie Gouranton, Laurent Perraudeau, Nathalie Denis, Evelyne Orain, Agnès Cottais, and many more.*

PANAMA coordinated the organization of a public event called “Journé Science et Musique” (“Music and Science Day”). 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 2016 hosted more than 500 visitors and was the official opening event of the “Festival des Sciences” week in Rennes.

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