



RESEARCH CENTER

FIELD

Digital Health, Biology and Earth

Activity Report 2018

Section Popularization

Edition: 2019-03-07

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ABS Project-Team

7.3. Popularization

This part mainly concerns Dorian Mazauric.

7.3.1. Internal or external Inria responsibilities

- Member of Mastic Commission (Médiation et Animation scientifiques Inria Sophia Antipolis - Méditerranée).
- Coordinator of the popularization project GALEJADE (Graphes et ALgorithmes : Ensemble de Jeux À Destination des Écoliers (mais pas que)) founded by Inria, Fondation Blaise Pascal, and Université Côte d'Azur. See <https://galejade.inria.fr>.
- Coordinator of the internships for undergraduates of middle school (niveau collège, troisième) at Inria Sophia Antipolis - Méditerranée (12 interns during one week).

7.3.2. Articles and contents

Frédéric Cazals published the following opinion article:

- *Recherche et développement : les entreprises françaises n'ont pas de vision*, Le Monde, April 2018. See https://www.lemonde.fr/sciences/article/2018/04/20/r-d-les-entreprises-francaises-n-ont-pas-de-vision_5288104_1650684.html.

Dorian Mazauric published online contents and posters. See <https://galejade.inria.fr>.

7.3.3. Education

- Trainings for 100 future teachers at ESPÉ (École Supérieure du Professorat et de l'Éducation) of Académie de Nice.
- Two trainings for 60 teachers of Cycle 3 (Le Cannet).
- Trainings for 20 teachers at numeric culture week-end organised by Class'Code MED.

7.3.4. Interventions

- National events:
 - Fête de la Science : Village des Sciences de Vinon-sur-Verdon, Juan-les-Pins, Villeneuve-Loubet et Mouans Sartoux : *La magie des graphes et du binaire, Algorithmes grandeur nature et jeux combinatoires*.
 - Semaine des maths : Conferences and activities at Centre International de Valbonne. With Christophe Godin. *Réfléchir pour Calculer ou Calculer pour Réfléchir*.
 - Conferences and activities at salon Code & Play 2018. *Graphes et algorithmes ? Jeux grandeur nature : algorithme de plus court chemin, algorithme de tri avec des cerceaux et des lattes en plastique – La magie des graphes et du binaire : tours de magie*.
- In educational institutions:
 - Two trainings for 60 teachers of Cycle 3 (Le Cannet).
 - Trainings for 100 future teachers at ESPÉ (École Supérieure du Professorat et de l'Éducation) of Académie de Nice.
 - High school: Conferences at Centre International de Valbonne. *Pas besoin de réfléchir, les ordinateurs calculent tellement vite ? Théorie des graphes et algorithmique*.
 - Middle school: Conferences at collège Alphonse Daudet of Nice and conferences at collège Jules Verne of Cagnes-sur-Mer. *La magie des graphes et du binaire*.
 - Primary: Conferences at École élémentaire of Tournettes-sur-Loup. With Florence Barbra.

- Welcoming of schoolchildren or the general public in an Inria center:
 - MathC2+ internship: Activity for 40 students (high school). With Maria Guramare. *Algorithmes grandeur nature pour le calcul du plus court chemin et pour trier.*
 - Open days of Inria Sophia Antipolis - Méditerranée: *La magie des graphes, des algorithmes et du binaire.*
 - Presentation for twelve interns of middle school (niveau collège, troisième) by Frédéric Cazals.

7.3.5. Creation of media or tools for science outreach

- Creation of the website of the popularization project GALEJADE (Graphes et ALgorithmes : Ensemble de Jeux À Destination des Écoliers (mais pas que)) founded by Inria, Fondation Blaise Pascal, and Université Côte d'Azur. See <https://galejade.inria.fr>.
- Development of wooden objects for the dissemination of the scientific culture: wooden plateau for graph algorithms and convex hull, chocolate bar game made by 3D printers, kakemonos... See <https://galejade.inria.fr/francais-pret-de-materiel/>.

BEAGLE Project-Team

9.3. Popularization

9.3.1. Interventions

- Eric Tannier gave a series of four lectures at the Université Populaire de Lyon, on "science and democracy".
- Eric Tannier participated to a round table on scientific communication for the BMIC days, november 2018.
- Audrey Denizot has participated in the organization and animation of activities for children about research during the event "Dans la blouse d'un chercheur" in ENS de Lyon. More specifically, she worked on a project aiming at explaining to children what microbes are, where they are and if/when you should worry about them and what is immunodeficiency. She made a small movie about it.
- Audrey Denizot is a member of a public outreach association : DéMesures. She is in charge of collaborations with external entities, including laboratories, museums and artists collectives. Website: <https://demesures.jimdo.com/> Facebook: <https://www.facebook.com/DMesures/> Twitter: <https://twitter.com/DMesures> Radio podcasts: <https://demesures.jimdo.com/radio-1/radio-brume/> Interviews are available on our YouTube channel: <https://www.youtube.com/channel/UCIn3CucWk1mLgbzE0noO2Iw>
- National events: Audrey Denizot organized several events including Fête de la Science 2017 and 2018 and A Nous de Voir 2018, as well as conducted projects such as radio podcasts on science/society topics, interviews of researchers, projects mixing Science and Art.

9.3.2. Creation of media or tools for science outreach

- In collaboration with Sylvain Charlat (LBBE, Lyon), we developed game to present the effect of random mutations on evolution to young children. The "GreenMice" game has been presented to the general public in the "Maison des Mathématiques et de l'Informatique" during the exhibition "Comme par hasard".

BIGS Project-Team

9.3. Popularization

- S. Ferrigno: Advisor of a group of students (EEIGM), "La main à la Pâte" project, elementary schools, Nancy, January-June 2018
- S. Ferrigno: Advisor of a group of students (EEIGM), "La main à la Pâte" project, Institut médico-éducatif (IME), Commercy, September-December 2018
- S. Ferrigno: Advisor of a group of students (EEIGM), "Utilisation de la technologie dans la médecine" Cgénial project, Collège Paul Verlaine, Malzéville, December 2018-February 2019.
- S. Ferrigno: Advisor of a group of students (EEIGM), "Le cartable connecté" Cgénial project, Collège de la Craffe, Nancy, December 2018-February 2019.

BONSAI Project-Team

8.3. Popularization

8.3.1. Internal or external Inria responsibilities

- Member of the CDT for Inria Lille (M. Pupin).
- Member of an Inria hiring committee (young researcher), Inria LNE (M. Pupin)

8.3.2. Education

- M. Pupin is the new leader of the collective *Informatique au féminin* from University of Lille, which was launched four years ago and whose goal is to organise computer science initiatives that reach teenage girls and female students. Among other actions, she is fully involved in the event *L codent, L créent* (she codes, she creates). This action aims to teach code to schoolgirls (13-15 years old), before they amass prejudices against computer science. 50 teenage girls were supervised by 11 female graduate computer science students, to create a proximity link between the young women. To emphasize the fact that coding is a creative and innovative pursuit, we chose to teach *Processing*, a programming language built for visual arts. After eight sessions of creative coding, a public exhibition was organized at the University with inspirational testimonies of women working in the field of computer science.
- The team participates to dissemination actions for high school students and high school teachers on a regular basis: multiple presentations on bioinformatics and research in bioinformatics with our dedicated “genome puzzles”, visit of high school students in the team (M. Salson).

CAPSID Project-Team (section vide)

DYLISS Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

Science en Cour[t]s (<http://sciences-en-courts.fr/>) Many of our on-going and former Ph-D students (M. Wery, L. Bourneuf, A. Antoine-Lorquin, C. Bettembourg, J. Coquet, V. Delannée, G. Garet, S. Prigent) have been heavily involved in the organization of a local Popularization Festival where Ph.D. students explain their thesis via short movies. The movies are presented to a professional jury composed of artists and scientists, and of high-school students. Previous years films can be viewed on the festival web-site [\[More details\]](#)

10.3.2. Interventions

- "J'peux pas j'ai informatique", Welcoming of high-school students to leverage stereotypes about computer sciences, Apr. 2018 [A. Siegel]
- Atelier Google Numerics, Rennes, table ronde *Enseigner le code dès le plus jeune âge*, Oct. 2018 [A. Siegel]
- "Rencontre des jeunes mathématiciennes", ENS Rennes, 2-days workshop for high-school girl students in mathematics. Introduction to gender stereotypes in mathematics, Nov. 2018 [A. Siegel]

10.3.3. Creation of media or tools for science outreach

- Le Language comme inspiration [\[youtube link\]](#) [H. Talibart]
- Les aventuriers du remède perdu [\[youtube link\]](#) [M. Louarn and M. Wery]

ERABLE Project-Team

9.3. Popularization

9.3.1. Interventions

Blerina Sinaimer and Ricardo Andrade participated to the Inria Fête de la Science in October 2018. Blerina Sinaimer and Mariana G. Ferrarini presented the research topics of the team in an event for welcoming international scientists at the Espace Ulys of the University of Lyon. The presentation was entitled “ERABLE : A bio-info symbiosis” and discussed mainly about the multidisciplinary of the ERABLE Team. Finally, Mariana Galvao Ferrarini participated in the Fête de la Science INRA at the Mediathèque de Bron in October 2018.

Fabrice Vavre participated to the Forum des métiers, Collège Clément Marot, on “La recherche au CNRS”.

GENSCALE Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- Member of the Interstice editorial board [P. Peterlongo]

10.3.2. Interventions

- In educational institutions : Participation to operation "A la découverte de la recherche" in high schools [P. Peterlongo]

10.3.3. Creation of media or tools for science outreach

- Short Movie "Les mutations génétiques, des événements spontanés à la thérapie génique", presented at Sciences en Courts, a local contest of popularization short movies made by PhD students (<http://sciences-en-courts.fr/>) [L. Lecompte, W. Delage].

IBIS Project-Team

8.3. Popularization

8.3.1. Creation of media or tools for science outreach

Hidde de Jong presented the work of IBIS in the framework of the communication action "Mon équipe en 180 secondes". The video is on-line at the following address: <https://videotheque.inria.fr/videotheque/media/47816;jsessionid=D615F60B85E6C88DEDD129AD56E4431E>

LIFEWARE Project-Team

9.3. Popularization

9.3.1. Articles and contents

Our publication on distinguishing resistance from resilience to antibiotic treatments [6] has been the object of a press release, institutional communications (at [Inria](#) and at [Institut Pasteur](#)), and some press attention, including notably by the UK daily mail journal.

9.3.2. Interventions

- Eléonore Bellot and Elise Weill participated at Fête de la Science in October 2018 at Inria Saclay île-de-France.
- Eléonore Bellot has received college school students for a visit to our research team on the design of logical gates in synthetic biology and their simulation in BIOCHAM.
- François Fages has received college school students for a visit to our research team with the question “Can we program any function ?”, answered negatively by proving Cantor’s theorem.

9.3.3. Creation of media or tools for science outreach

- François Fages has created several [BIOCHAM notebooks associated to his course at MPRI](#) and available online.
- François Fages and Sylvain Soliman have created one [BIOCHAM tutorial notebook presented at ASSB 2018](#) and available online.

MORPHEME Project-Team

9.3. Popularization

9.3.1. Interventions

The Morpheme team took part in "La fête de la Science" both at Inria and during the "Village de la Science" in Juan-Les-Pins. Sarah Laroui, Somia Rahnmoun and Arne Bechensteen were holding a stand in these events.

MOSAIC Team

9.3. Popularization

9.3.1. Articles and contents

- Christophe Godin
 - made a presentation at *My team in 180 seconds*, June 2018 (in French).
 - wrote a paper *Pourquoi les Plantes font des maths* co-authored with Fabrice Besnard and Teva Vernoux, that was published in *Pour La Science* (Aug 2018) and in the hors-série issue on *La révolution végétale* (Nov 2018). (Nov 2018)

9.3.2. Interventions

- O. Ali has been an invited speaker for an art/science conference and debate organized by the modern art museum of Lyon, October 2018.
- Romain Azaïs won a special mention in the comics contest *Maths et Polar* organized by the website *Image des Mathématiques* of the CNRS, April 2018.
- Guillaume Cerutti, Christophe Godin and Jonathan Legrand have been involved in Déclics initiatives (presentation and discussion with high school students in order to promote science and research careers), October and December 2018.
- Christophe Godin gave an invited 2 hours seminar to 4 classes of high-school students for the Math week (March) at the Lycée International de Valbonne, France.
- H. Oliveri took part in the Class'Code Initiative, a Mooc produced by Inria and OpenClassRoom providing supports and guidelines for people wanting to teach computer science to young childrens.

PLEIADE Team

9.2. Popularization

9.2.1. Internal or external Inria responsibilities

David Sherman is president of the Commission for Technology Development (CDT) of the Inria Bordeaux Sud-Ouest research center. The CDT has two roles. First, it evaluates funding requests for Technology Development and Technology Transfer projects, which typically involve hiring technical staff. Second, the CDT is responsible for validating and overseeing contract engineers hired by Inria project-teams.

9.2.2. Interventions

The “Family-3D” activity (see below) was presented on three occasions:

- During the 10 year celebration on the evening of September 27
- During the Open House all day October 13
- During the Fête de la Science, to 8 groups of 12 students

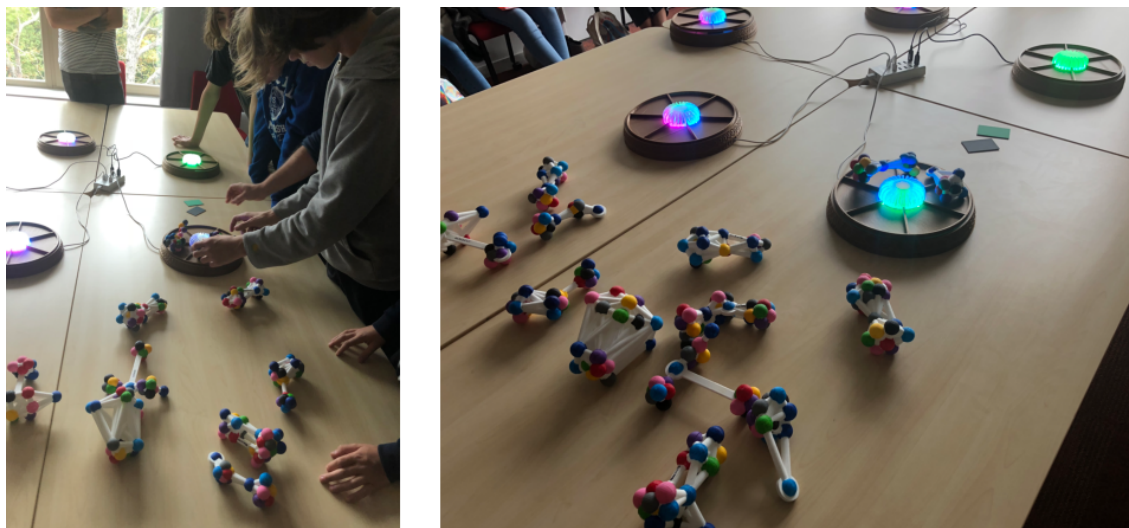


Figure 6. Family-3D activity during the Circuit Scientifique of the Fête de la Science, 2018

9.2.3. Creation of media or tools for science outreach

Pleiaide created an interactive activity “Family-3D” to explain the methods and uses of pattern classification of protein families. Using new software developed by the team we laid out 30 families in 3D space and converting those shapes to 3D volumes. The selected families had been previously grouped into biologically pertinent classes by human curators. Each shape was printed with an embedded unique RFID tag. We also designed and printed five interactive terminals, containing a microcontroller, an RFID reader with a custom-designed inductive coil as input, and an LED ring as output. Participants would propose groups of shapes that they believed belonged to the same class, and the terminal would evaluate the group.

David Sherman contributes open-source software development to the Aseba platform for educational robotics⁰, deployed in Thymio II robots used by children as well as in the simulator used by Class'Code⁰ to train teachers.

David Sherman and Louise-Amélie Schmitt developed AsebaHub, a specialized WiFi hub for connecting Thymio-II robots into a local-area network. AsebaHub acts as either a wireless Access Point to which users may connect, or as a Bridge to an existing local-area network. Robots can be discovered using mDNS-sd (Zeroconf/Bonjour). AsebaHub works out of the box with the Aseba Studio and VPL programming environments, and can also provide an HTTP service that is compatible with Scratch, Snap!, or other environments.

⁰<http://aseba.io/>

⁰<https://pixees.fr/classcode-la-formation-associee-a-pixees/>

SERPICO Project-Team (section vide)

ARAMIS Project-Team

10.3. Popularization

10.3.1. Articles and contents

- S. Durrleman's interviews were published in the magazines *Le Point*, *Sciences et Avenir*, *Usine Nouvelle*, *Le Temps*, *revue Pharma*, and were broadcasted on the radio *France Culture*. He published also an article in the special issue on artificial intelligence of the newspaper *Libération*.
- S. Durrleman did popularization presentations at *Rotary Club Chamonix*, *Cercle des amis de l'ICM*, and *Salon de l'argus de l'assurance*.
- F. De Vico Fallani did a popularization presentation at *La Française - Investing group*, Paris
- Olivier Colliot gave an interview for the TV channel *France 5*, for the program "*Magazine de la Santé*".
- Stéphane Epelbaum participated to multiple events dedicated to general audience outreach including: articles in journals (*L'Express*, *Cerveau & Psycho*, *Sciences Avenir*), Radio shows and podcasts (*France inter: Grand Bien vous fasse*, *Figaro Live*) and TV shows (*Pourquoi docteur*, *Questions aux experts*).
- The team contributed to the book "*Le Grand Atlas du Cerveau*" (Glénat).

10.3.2. Interventions

- O. Colliot gave a presentation to members of the *German Bundestag*, Paris, France, December 2018.
- Stéphane Epelbaum participated to a charity event at the *Foire internationale d'Art Contemporain (FIAC) 2018* on the 20th of November 2018.

10.3.3. Internal action

- O. Colliot gave a presentation for the charity event ("*Evènement solidaire*" of *Inria*, September 2018).

ATHENA Project-Team

8.3. Popularization

8.3.1. Interventions

- M. Clerc participated in the Brain Awareness Week with a talk about Brain Computer Interfaces at CHU Nice Pasteur, March 16 2018.
- M. Clerc participated in the Brain Awareness Week with a talk about Music and the Brain at Villa Arson, Nice, March 17 2018.
- M. Clerc, T. Papadopoulo, F. Turi and R. Lacroix participated in the Fête de la Science with a BCI demo where the general public could test a P300 speller system.

BIOVISION Project-Team

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

- E. Kartsaki and S. Souihel are participating to the organization of the Inria Sophia PhD seminars.

9.3.2. Interventions

- The Biovision team participated to the "fête de la science 2018".

CAMIN Team

9.3. Popularization

9.3.1. Education

Christine Azevedo Coste is mentor (2018-2019) for one Savanturiers project with Saussan school (CM1/CM2 level) <https://les-savanturiers.cri-paris.org/>

Christine Azevedo organized initiation sessions to informatics using Thymio robot at École Calendreta La Cardonilha (Mèze, France) in CP/CE1 level, 3 sessions of 2 hours (April 2018) .

Christine Azevedo organized initiation sessions to informatics using Thymio robot at École Valfalis (Montbazin, France) in CM1/CM2 level, 4 sessions of 2 hours (May-June 2018) .

As a COERLE member Christine Azevedo Coste was involved in one session on Ethics for phd students in Inria IRISA center (Rennes, france) (November 2018).

9.3.2. Interventions

- François Bonnetblanc : Pint of Science 16 mai 2018, François Bonnetblanc, Montpellier

EPIONE Project-Team

9.3. Popularization

9.3.1. Interventions

- Nicolas Cedilnik, Pierre Tramaloni, Thomas Demarcy, Hervé Delingette and Maxime Sermesant organised a cardiac intervention simulator demo and a cochlear implant demo for the Science Festival at Inria (Dec 7).
- On April the 10th, during the "mathematics week", 2 PhD students (Nicolas Cedilnik and Raphael Sivera) met young pupils (age 8-10) at the ESPE (école supérieure du professorat et de l'éducation) Nice. The pupils were introduced to mathematical concepts in a practical way through the use of toys.

GALEN-POST Team

10.3. Popularization

10.3.1. Interventions

Enzo Batistella, Marie-Caroline Corbineau, Théo Estienne and Maria Vakalopoulou have participated at the 'Demi-journée Recherche' organised by CentraleSupélec for the first year students of the school.

MATHNEURO Team

6.3. Popularization

6.3.1. Interventions

National events: Romain Veltz participated at the conference "Fête de la Science".

6.3.2. Internal action

Romain Veltz gave a talk at "Café des sciences" about "Vers un modèle de synapse excitatrice"

MIMESIS Team (section vide)

MNEMOSYNE Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

Thierry Viéville is in charge of mission regarding e-education in particular the collaborations with the UCA university on these subjects, more precisely the LINE laboratory ESPE of Nice where he is affected at 20%, for the creation and co-direction of the MSc and the relation with EducAzur, and the actions within the Class Code project.

10.3.2. Articles and contents

- For online publications: F. Alexandre in Usbek & Rica (June 8) and Inriality (May 17): <https://usbeketrica.com/article/2067-la-singularite-empire-des-machines> and <https://www.inriality.fr/informatique/informatique-ia-intelligence-artificielle/2067-la-singularite-ou/>;
- Interviews in order to popularize: F. Alexandre in La Tribune newspaper (September 10): <https://objectifaquitaine.latribune.fr/innovation/2018-09-10/inria-bordeaux-10-ans-de-recherches-a-la-pointe-du-numerique-789911.html>; I. Chraïbi Kaadoud and A. Garenne in blog scilogs about neural networks: <http://www.scilogs.fr/intelligence-mecanique/architecture-reseaux-de-neurones-de-choix/>; <http://www.scilogs.fr/intelligence-mecanique/architecture-des-reseaux-de-neurones-reseaux-de-neurones-artificiels-classiques-2-3/> and <http://www.scilogs.fr/intelligence-mecanique/architecture-des-reseaux-de-neurones-reseaux-de-neurones-impulsionnels-3-3/>; X. Hinaut about organizing a Hackathon in <https://pixees.fr/hack1-cerveau/>; N. Rougier in CNRS website (September 21): <http://www4.cnrs-dir.fr/insb/recherche/parutions/articles2018/t-boraud.html> and in Le Monde newspaper (September 19): https://www.lemonde.fr/sciences/article/2018/09/19/les-emotions-au-coeur-de-l-apprentissage_5357127_1650684.html; Thierry Viéville is co-editor and/or co-author of about two papers per month on <http://binaire.blog.lemonde.fr>.

10.3.3. Education

F. Alexandre: Teaching to the high-school professors in Philosophy of the academy of Poitiers about Artificial Intelligence (April, 25); Thierry Viéville has realized more than ten session of formation (over 400 teachers involved) within the scope of the Class Code project, and co-organized two of them.

10.3.4. Interventions

- National events: participation of the team on the NeuroCampus to the Week of the Brain (Semaine du Cerveau: March 19-23); to the Declics program for high-schools (<http://www.cerclefer.org/fr/declics/>, Nov. 22); Fête de la Science at Inria Bordeaux and Cap Sciences in October: The humanoid Nao robot was listening to the instructions and learning names of objects. This demo was performed by X. Hinaut and A. Strock with a German collaborator from the University of Hamburg (J. Twiefel).
- Public exhibitions:
 - “Brain and Artificial Intelligence” at Regional Headquarters in Limoges (Feb. 2);
 - “What is the usefulness of Artificial Intelligence ?” at Café des Sciences in Soustons (Dec. 12) (F. Alexandre);
 - Science pour tous (Bordeaux), Machine learning (Communauté Urbaine de Bordeaux), AI Unplugged (Bordeaux), Déambulation autour de l’IA (Bordeaux), L’intelligence artificielle en question (Paris) (N. Rougier);
 - Participation to the Neurocampus Day (S. Pagliarini, poster “Learning an inverse model for vocal production: toward a bio-inspired model”);

- Thierry Viéville: Interventions on artificial Intelligence and the development of critical thinking on large audience popularization events (Universcience, Médiathèque de Bordeaux, Semaine du Cerveau, Fête de la Science, Select Sophia-Antipolis, more than 200 persons involved) and three interactive talks in high-school (more than 150 students involved).
- T. Firmo Drumond and B. Teja Nallapu prepared and presented a demo for the 10 years of the Bordeaux Inria Centre (September 27).
- N. Rougier and X. Hinaut participated to a theater performance on AI, showing the state of work of an artistic residence in November.

10.3.5. Internal action

- Internal meetings: T. Firmo Drumond presented Deep Learning to the Inria Bordeaux Café des Sciences (March 22);
- Nicolas Rougier gave a talk about scientific fraud and misconduct at the institute of neurodegenerative diseases.

10.3.6. Creation of media or tools for science outreach

Thanks to fundings from the Bordeaux Museum of Science Cap Sciences (<http://www.cap-sciences.net/>) and from the Foundation Blaise Pascal (<https://www.fondation-blaise-pascal.org/>), we have begun to design a software tool to run small demonstrative scenarios, to help everyone discover the brain functions at the origin of our sensorimotor and vital cognitive behaviors (instinctive and motivated behavior, selection of embodied action, emotional decision-making, seat of self-awareness, etc.). This resource is for a wide audience to whom we can show scenarios, but also co-build multi-media resources to share methods and knowledge (participatory scientific mediation approach) and to discuss these topics. It is also at the disposal of scientific mediators (researchers and beyond) who wish to co-construct such resources, or to present research results involving the animation of anatomy of the nervous system as well as of users or authors of computer code who want to reuse shared technologies to derive other applications, in particular become familiar with the specification languages (here JSON and markdown).

NEUROSYS Project-Team

9.3. Popularization

Neurosys' activities. Artificial Intelligence, IoT and robotics for health,association ATD quart-monde, June 10th 2018 (L. Bougrain)

PARIETAL Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- Philippe Ciuciu has been member of the Inria Saclay scientific commission since 2016
- Alexandre Gramfort is member of the steering committee of the Paris-Saclay Center for Data Science
- Alexandre is a Member of the technical development committee of Inria Saclay since Dec 2018
- Bertrand Thirion is Deputy head of research of Inria Saclay research center
- Bertrand Thirion, Leader of the Datasense research axis of the Digicosme Labex
- Bertrand Thirion, Member of the steering committee of the Dataia Convergence Institute
- Bertrand Thirion, Member of the steering committee of the Computer Science Department of Paris Saclay University.
- Gaël Varoquaux was Member of the technical development committee of Inria Saclay until Dec 2018
- Gaël Varoquaux is member of the doctoral monitoring committee of Inria Saclay
- Gaël Varoquaux is member of the steering committee of the Paris-Saclay Center for Data Science

10.3.2. Articles and contents

- Gaël Varoquaux was interviewed by [ActuIA](#)
- Alexandre Gramfort was interviewed by [ActuIA](#)
- Alexandre Gramfort was interviewed by [Libération](#)
- Alexandre Gramfort, Olivier Grisel Gaël Varoquaux are interviewed by [Les Echos](#)

10.3.3. Interventions

- Olivier Grisel gave an interview at the Paris Open Source Summit

10.3.4. Internal action

- In June 2018, Philippe Ciuciu did a training session on the DRF Impulsion funding mechanism at the seminar of new hired CEA DRF scientists"
- In April 2018, Denis Engemann and Alexandre Gramfort gave a 2-day educational course for cognitive neuroscientists at NeuroSpin on analysis of MEG and EEG data using Python.

10.3.5. Creation of media or tools for science outreach

Philippe Ciuciu made Two videos together with the CEA communication division on COSMIC project (funded by CEA)

- Long version: https://www.youtube.com/watch?v=gQh6D_vpkSo&t=23s&fbclid=IwAR0OcU3JEy4KQmo6DD-iN8otjlowyeXDkEF7ljniuZOkI-aWhGqyHhQzruo
- Short version: https://www.youtube.com/watch?v=p_KMEQGK-WA&fbclid=IwAR3xcf8e98M77IF9mpQSDWfKppjOt7p

Gaël Varoquaux, Olivier Grisel, Alexandre Gramfort, Guillaume Lemaître, Joris van den Bossche participated in a general-public movie about scikit-learn: <https://www.youtube.com/watch?v=twqdxTCkeyk&t=9s>

VISAGES Project-Team

10.3. Popularization

10.3.1. Press

- Isabelle Bonan and Christian Barillot did present the activity of Neurofeedback in Visages during a press conference in Paris on November 14th, 2018 organized by Inria. Press reports have been issued from this conference : France Inter morning news, Usbek et Rica (<https://usbeketrica.com/article/le-xxieme-siecle-sera-celui-du-cerveau>), and Egora (<https://www.egora.fr/actus-medicales/neurologie/43575-1-interface-cerveau-ordinateur-efficace-dans-le-traitement-de>).
- Article in "Sciences Ouest" on "*Un miroir intelligent pour entraîner son cerveau*" <https://www.espace-sciences.org/sciences-ouest/366/dossier/un-miroir-intelligent-pour-entraîner-son-cerveau>, Nov. 2018

10.3.2. Film

A film presenting the Neurinfo imaging facility was recorded by Inria for the official launching ceremony of the new 3T Prisma scanner and further use for general communication about Neurinfo. Reports on local press: Ouest-france (<https://www.ouest-france.fr/bretagne/rennes-35000/video-une-irm-ultra-puissante-pour-faire-avancer-la-recherche-rennes-6095044>) and TV-Rennes (<https://www.tvr.bzh/programmes/tvr-soir-1543339500>).

10.3.3. Articles and contents

- Camille Maumet: Blog post “Open science working group on scientific software” <http://blog.camillemaumet.com/posts/12>, November, personal website.
- Elise Bannier: Blog post “Village des sciences 2018” <https://team.inria.fr/visages/village-des-sciences-2018/>, October, VisAGeS blog.
- Camille Maumet: Blog post “Extending BIDS to fMRI analyses” <http://blog.camillemaumet.com/posts/11>, October, personal website.
- Olivier Commowick: Blog post: “Anima scripts release” <https://team.inria.fr/visages/anima-scripts-release/>, September, VisAGeS blog.
- Camille Maumet: Blog post “Collaborative AFNI projects at DC code convergence” <http://blog.camillemaumet.com/posts/10>, September, personal website.
- Camille Maumet: Blog post “Meeting Montreal neuroinformatics community at the INCF congress and hackathon” <http://blog.camillemaumet.com/posts/9>, August, personal website.
- Camille Maumet: Blog post “Mentoring for Mozilla Open Leaders” <http://blog.camillemaumet.com/posts/8>, August, personal website.
- Camille Maumet with Claire Cury: Blog post “Interview: Let’s organise a Brainhack!” <https://team.inria.fr/visages/interview-lets-organise-a-brainhack/>, July, VisAGeS blog.
- Camille Maumet with Elise Bannier: Blog post “Interview: Participating in my first hackathon at Brainhack Rennes 2018” <https://team.inria.fr/visages/participating-in-my-first-hackathon-at-brainhack-rennes-2018/>, July, VisAGeS blog.
- Camille Maumet: Blog post “OHBM 2018: first remotely-attended conference” <http://blog.camillemaumet.com/posts/7>, June, personal website.
- Camille Maumet: Blog post “Sprinting with bio-imagers and how I learnt about NEUBIAS, EuBI, Elixir and tried out myBinder!” <http://blog.camillemaumet.com/posts/6>, May, personal website.
- Olivier Commowick: Blog post “Anima v3.0 release” <https://team.inria.fr/visages/anima-v3-0-release/>, March, VisAGeS blog.

- Claire Cury: Blog post “Workshop Multiple Sclerosis 2018 (UCL, Inria)” <https://team.inria.fr/visages/workshop-multiple-sclerosis-2018-ucl-inria/>, April, VisAGeS blog.
- Olivier Commowick: Blog post “Brainhack Rennes 2018 (April 25-26)” <https://team.inria.fr/visages/brainhack-rennes-2018-april-25-26/>, March, VisAGeS blog.
- Olivier Commowick: Blog post “medInria 3.0 available” <https://team.inria.fr/visages/medinria-3-0-available/>, March, VisAGeS blog.

10.3.4. Education

- L codent L créent - An outreach program to send PhD students to teach Python to middle school students in 8 sessions of 45 minutes. Tassadit Bouadi (Univ. Rennes 1), Camille Maumet (VisAGeS) and Anne-Cecile Orgerie (Myriads) are coordinating the local version of this program, initiated in Lille. The first session in Rennes is planned for April 2019. The program is currently supported by: Fondation Blaise Pascal, ED MathSTIC, Inria and Fondation Rennes 1.

10.3.5. Interventions

10.3.5.1. National brain week: “Semaine du Cerveau”

- Giulia Lioi: Talk “Lire dans son cerveau grâce au neurofeedback EEG, c’est mieux bouger”, March 14, Warpzone, Rennes, France.
- Mathis Fleury: Bar en (neuro) sciences; May 14-16; Presentation of the Neurofeedback and demonstration of a EEG based Neurofeedback with a motor imagery paradigm.

10.3.5.2. National science week: “Village des sciences”

Visages took part in the Village des Sciences 2018, opening the Neurinfo platform to 45 middle school students (Oct 5) and 120 visitors from the general public (Oct 6-7), Oct 5-7, Rennes, France. <https://www.univ-rennes1.fr/evenements/20072018/village-des-sciences-2018-visites-guidees-de-laboratoires-pour-les-scolaires>, <https://team.inria.fr/visages/members-area/projects/village-des-science-2018/>. The event was coordinated by Julien Le Bonheur from the University of Rennes, and Elise Bannier coordinated the contribution of Neurinfo/Visages. We covered 4 themes:

- Giulia Lioi, Mathis Fleury, Simon Butet, Pauline Rolland: Neurofeedback EEG
- Pierre Maurel, Charlélie Erhart, Antoine Legouhy, Corentin Vallée, Francesca Galassi, Julie Coloigner: Image processing with MedInria
- Isabelle Corouge, Catherine Guillemot, Emmanuel Caruyer, Elise Bannier, Benjamin Parat: Brain and MRI
- Quentin Duché, Florian Chapelain, Virginie Dardier: Functional MRI

10.3.5.3. Other interventions

- Pierre-Yves Jonin: Series of 6 talks on neuropsychology, Universités du Temps Libre de Bretagne, Jan-Dec, Rennes, France.
- Pierre-Yves Jonin: Talk “La mémoire humaine, comment la conserver, quand s’inquiéter”, Bien Vieillir en Ille-et-Vilaine, June, Rennes, France.
- Mathis Fleury: Talk “Qu’est ce qu’un doctorant ?” Journée des métiers IUT rennes - , Nov 16, IUT Rennes, France.
- Camille Maumet: Talk to middle school students (around 100) “La neuroinformatique”, PRNB, April, Rennes, France.
- Olivier Commowick: Presentation of research done in VisAGeS on medical image processing and of the MedInria software, Journée LOGIN, Nov 27, Grenoble, France.

10.3.6. Creation of media or tools for science outreach

- Launching of a Twitter account for the VisAGeS team (Camille Maumet) and setup on the VisAGeS website (Olivier Commowick) http://twitter.com/visages_inria. Tweets by lab members (Quentin Duché, Christian Barillot)
- Development of the VisAGeS blog and writing of blog posts (Camille Maumet, Olivier Commowick, Claire Cury, Elise Bannier).

AIRSEA Project-Team

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

E.Kazantsev is a member of the Local Commission for Permanent Formation of Inria Grenoble - Rhône-Alpes.

9.3.2. Articles and contents

Blog : E. Blayo, Les big data peuvent-ils faire la pluie et le beau temps ?, October 25, 2018, <http://binaire.blog.lemonde.fr/2018/10/25/les-big-data-peuvent-ils-faire-la-pluie-et-le-beau-temps/Binaire> and <https://theconversation.com/quand-les-big-data-font-la-pluie-et-le-beau-temps-105608>The conversation

Interviews : E. Blayo, Carnets de campagne - France Inter, September 27, 2018

E. Arnaud, "Sans le numérique, pas de prévision météo !" Dossier C'est quoi le numérique. "Le dauphiné des enfants", numéro 14, novembre-décembre 2018, http://www.ledauphinedesenfants.ledauphine.com/numero-archiv/dde2018_14#

In collaboration with teachers, M. Nodet wrote an article about how to set up a "glaciers" for secondary school teachers in Reperes IREM journal [31]

9.3.3. Education

E. Arnaud, animation of a "Laboratoire des mathématiques" in Lycée Pablo Neruda (Saint Martin d'Hères), on the subject of math and critical thinking.

C.Kazantsev is a member of an IREM group for creation of scientific activities for professional development of secondary schools teachers.

C.Kazantsev is the creator and animator of the mathematical club for motivated pupils aged from 8 up to 18 years. 10 meetings for about 20 pupils of 2 hours each have been organized on sunday morning during the year.

C.Kazantsev participated in the meeting "Espace Mathématique Francophone" EMF2018, Gennevilliers, October, 22-26, 2018. Presentation of animations and participation in the working group "Étude des processus de vulgarisation".

C.Kazantsev participated in the elaboration and planning of the permanent exposition of the "Salle de thé" group at the meeting IHP2020, 30 october, Institut Henri Poincaré, Paris.

9.3.4. Interventions

- National events:
 - E. Arnaud, M. Nodet. (Se) tromper avec les chiffres. Colloque "Sciences et esprit critique, interroger les certitudes", Maison pour la sciences, Académie de Grenoble, 8 nov. 2018, Grenoble - intervention in a training days for teachers from Education Nationale
 - M. Nodet facilitated a yearly math club with three secondary schools around Grenoble, aiming pupils to research open projects ("Math en Jeans" initiative)
 - M. Nodet facilitated a workshop about "Math modelling, example with oceanography" for high school and secondary school teachers
 - M. Nodet welcomed schoolchildren for short-time internship and offered a small workshop about oceanography
 - E. Blayo gave several outreach talks, in particular for middle school and high school students, and for more general audiences.

Ch. Kazantsev and E. Blayo are strongly involved in the creation of "La Grange des maths", a science popularization center that will be located in Varcès (south of Grenoble), which will offer a huge variety of mathematical hands-on exhibits. See <http://www.la-grange-des-maths.fr/>

Ch. Kazantsev participated in the "Fête de la Science", Parvis de Sciences, October, 13.

Ch. Kazantsev participated in the "Fille et Maths" day, Decembre, 5, with the presentation of the "La Grange des Maths" center and its activities.

Ch. Kazantsev presented the exposition "La recherche se prend au jeu" at the "Culture and mathematical games Salon" by invitation of the Henri Poincaré Institute, Place St Sulpice, Paris, 24-27 May.

- Public exhibitions

C.Kazantsev participated in the "Oriel des Maths" and in the "Forum des associations" with the presentation of the "La Grange des Maths" center and its activities. Varcès, March, 11.

C.Kazantsev participated at the "Raout de Domène" with the presentation of mathematical animations. Domene, September, 3.

C.Kazantsev participated at the "Maths en ville" with the presentation of the "La Grange des Maths" center and its activities. Grenoble, November, 28.

- In educational institutions

L. Debreu gave an introductory lecture on the finite element method at the Ecole des Pupilles de l' AIR (superior mathematics)

C.Kazantsev presented mathematical animations to pupils of the Poussous scholl in Varcès for about 80 children during 3 hours. Varcès, March, 15.

9.3.5. Creation of media or tools for science outreach

C.Kazantsev participated in the edition of the Teachers notebooks which explain and advise how to use the "La Grange Suitcases" (sets of mathematical games, problems and animations) destined for primary and secondary schools teachers as well as for the general public.

C.Kazantsev participated in the creation of mathematical activities that can be autonomously used by schoolchildren of primary and secondary schools and by the general public.

E. Arnaud, in charge of the UGA Idex project math@uga : implementation of a collaborative moodle platform <http://math.u-ga.fr> to share pedagogical resources within teachers and towards students.

E. Arnaud, participation to UGA Idex projects Caseine and data@ugat

ANGE Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

Julien Salomon is a member of the "Comité des usagers de la rue Barrault" in view of the move of Paris Inria Center to Rue Barrault.

10.3.2. Articles and contents

Julien Salomon wrote a vulgarization article "Décomposer et itérer pour résoudre un problème " for the CNRS website " Images des mathématiques " (12/2018)

10.3.3. Education

- Edwige Godlewski is the president of the "commission française pour l'enseignement des mathématiques" (CFEM)
- Jacques Sainte-Marie is a member of the "Groupe de travail : Recherche et développement durable" at the French Ministry of Research.

10.3.4. Interventions

- Julien Salomon took part of the "Salon Culture et Jeux mathématiques" - Stand AMIES (Paris, 24/05/18)
- Julien Salomon gave a talk at Waterford Kamhlaba United World College, Mbabane, Eswatini (Swaziland, 5/8/2018).
- Julien Salomon took part of "Fête de la science", and gave a talk at école rue st-Isaure, 18ème (Paris, 11/10/2018)
- Léa Boittin 25/5/18 took part of the "Salon Culture et Jeux mathématiques" - Stand AMIES (Paris, 25/05/18)
- Vivien Mallet gave a talk "Bruit dans la ville", for the association "Versailles environnement initiative" (01/12/18)

10.3.5. Internal action

Julien Salomon gave talk (3.4.18) at the internal meeting "La demi-heure de science": "Décomposer et itérer pour résoudre un problème complexe, quelques exemples en calcul scientifique".

Anne Mangeney gave talk (4.9.18) at the internal meeting "La demi-heure de science": "Les ondes sismiques : une mine d'informations sur les risques naturels".

CASTOR Project-Team (section vide)

COFFEE Project-Team (section vide)

FLUMINANCE Project-Team

9.3. Popularization

9.3.1. Internal or external Inria responsibilities

Jocelyne Erhel

- member of the Inria local committee for health and safety (réfèrent chercheur) 2016-2018.
- member of the Inria administrative commission (CAP) for researchers, from January 2016.
- member of the Inria national committee for secondment, 2016.

Etienne Mémin

- Responsible of the "Commission Développement Technologique" Inria Rennes
- Member of the "Commission Personnel" Inria-IRISA Rennes

9.3.2. Education

Jocelyne Erhel

- présidente du jury du rallye de mathématiques du CNED, since 2017.

9.3.3. Interventions

Jocelyne Erhel

- talk about melting ice caps, general public, Musée des Arts et Métiers, March 2018.
- talk about spreading epidemics, stage de collégiens, January and February 2018.
- contribution to website redesign of Interstices, 2017-2018.

9.3.4. Creation of media or tools for science outreach

Jocelyne Erhel

- scientific coordinator of the website Interstices (since June 2012).
- contribution to website redesign of Interstices, 2017-2018.

LEMON Team

10.3. Popularization

Antoine Rousseau is member of the editorial board of [Interstices](#) and the [Binaire Blog](#) in Le Monde.

10.3.1. Internal or external Inria responsibilities

Antoine Rousseau is member of "Bureau du Comité des Équipes-Projet" in the research center of Sophia-Antipolis Méditerranée.

10.3.2. Interventions

Antoine Rousseau has given lectures in the following events:

- Fête de la Science (Genopolys Montpellier) and Semaine des maths (Collège Les Fontanilles, Castelnaudary)
- FUTUR-E-S in La Villette (Paris) for a [demo of Tsunamilab](#)
- another Tsunamilab demo for Region Occitanie (November 30th, Port Barcarrès)
- [Centre d'Alembert](#) (Orsay-Saclay)
- public schools of Aubais (Gard) and Castelnaudary (Aude)

10.3.3. Internal action

- Antoine Rousseau gave a talk in the Café des Sciences at Inria Rocquencourt, March 20th.

10.3.4. Creation of media or tools for science outreach

- Antoine Rousseau has contributed to the development of Tsunamilab in collaboration with Inria Chile
- Antoine Rousseau is a co-administrator of the association [Le Calendrier Mathématique](#)

MAGIQUE-3D Project-Team

9.3. Popularization

9.3.1. Interventions

- Justine Labat participated in scientific 'speed datings' during the 'Filles et Maths' day at Pau in May 2018.
- Justine Labat animated the stand in Mathematics during 'Le Village des Sciences' day at Pau in October 2018.
- Sébastien Tordeux gave a talk on numerical analysis in the Cercle Sofia Kovalevskaja of Toulouse in May 2018
- Juliette Chabassier participated to a movie - debate event in Cognac in march 2018.
- Juliette Chabassier animated a workshop around virtual piano during the Inria "10 years night" in september 2018.
- Juliette Chabassier animated a workshop around virtual piano during the Inria "fête de la science" in october 2018.
- Robin Tournemenne animated a workshop around virtual piano during the Inria "fête de la science" in october 2018.
- Juliette Chabassier animated a workshop around virtual piano during the Inria "open doors day" in october 2018.
- Juliette Chabassier welcomed L3 students around a virtual piano workshop in december 2018.

SERENA Project-Team

10.3. Popularization

10.3.1. Interventions

- M. Kern: présentation “Des mathématiques pour modéliser et simuler le monde”, Lycée des Pierres–Vives (Terminale S), Carrières–sur–Seine, May 2018.
- M. Vohralík: “Advancing scientific knowledge together to support innovation”, dissemination video, [IFP Energies Nouvelles](#). Available [here](#). February 2018.

STEPP Project-Team

8.3. Popularization

8.3.1. Conferences “Understanding and Acting” :

Saving Civilization is not a spectator sport
Lester Brown

Following a dynamics of exponential growth in a finite world, humanity today faces a number of unprecedented and tightly interlinked challenges. With a growing number of environmental limits being largely and irreversibly exceeded (GHG concentrations in the atmosphere, biodiversity loss, soil erosion, freshwater shortages...), social, economic, geopolitical, humanitarian (etc.) consequences are becoming more urgent than ever to address, while the threat of an uncontrolled global collapse is now more than a prospect. It is urgent to initiate deep, structural, socioeconomic changes on virtually all aspects of our increasingly global societies (economics, industrial and agricultural production, consumption, education, all requiring major new local and global policies).

In view of these facts, the STEEP research team has initiated in 2016 a series of conferences-debates entitled “Understanding & Acting” (“Comprendre et agir”) that examines these issues in order to help researchers and citizens to increase their awareness of the various issues at stake in order to initiate relevant individual and collective actions. From now on, the scientific community at large must realize that its duty also lies in helping citizens to better understand these issues. If the fraction of people in society whose privilege is to be paid to think about society’s problems do not seize this opportunity in the critical times we face, who will? Researchers must become more involved in the search of socioeconomic alternatives and help citizens to implement them. The interactions between researchers and citizens must also to be reinvented.

The presentations of this series of conferences typically last between 30 to 45 minutes; they are followed by a 45 minute public debate with the audience. The presentations are captured on video and then made directly accessible on the YouTube Channel “Comprendre et Agir”. At the end of 2017 the YouTube channel reached almost 45,000 views with a rate of integral viewings remaining at above 25%.

Examples of conferences given in 2016-2017:

- “Why and how to recognize money as a common good?” by Jean-Michel Servet, Graduate institute of international and development studies (IHEID) at Genève.
- “What alternative to the crisis of representation?” by Loic Blondiaux, University of Paris I Panthéon-Sorbonne.
- “Reinventing agriculture and food in the 21st century?” by Gilles Billen, CNRS.
- “Can the commons movement re-activate democracy?” by Christian Laval, University of Paris Ouest Nanterre La Défense.
- “Limiting climate change: Why do we not do it?” by Denis Dupré, University of Grenoble Alpes.
- “Understanding society collapses. What future for ours?” by Emmanuel Prados, Inria.
- “Environment, economy, collapse: squaring the circle?” by Pierre-Yves Longaretti, CNRS.

Link to the web page of the series [program, abstracts, dates, complements etc.]:

<https://team.inria.fr/steep/les-conferences-debats-comprendre-et-agir/>

Link to the YouTube channel :

https://www.youtube.com/channel/UCJbcXCcOA63M8VMysAbmt_A

8.3.2. Other popularization activities :

- Emmanuel Prados was guest speaker at
 - the **public debate "defying disaster"** that held at Grenoble City Hall., Grenoble, France, 13 December 2018. Organizers: City of Grenoble. "Climat, défier la catastrophe : vers un nouvel humanisme"
http://www.grenoble.fr/uploads/Externe/a1/757_069_Conference-Climat-defier-la-catastrophe-vers-un-nouvel-humanisme.pdf
Video of the conference on YouTube : <https://www.youtube.com/watch?v=IfvFHx0kYa0>
 - the **exchange day on travel modelling in Grenoble** "", Grenoble, France, 5 October 2018. Organizers: Agence d'urbanisme de Grenoble.
 - the **Controversation** entitled "Digital technology in the face of environmental impasse: an exit door or a way forward?", Aix en Provence, France, 17th of February 2018. Organizers: association "Tous Chercheurs" in collaboration with the students of the School of Journalism and Communication of Aix-Marseille ; Amina Mokrane.
 - the **Opening Conference at the Alterre Day** «Voyages en transitions » : "De l'urgence de tout changer face à l'effondrement qui vient", Dijon, France, March 21th 2018. Organizers: Alterre Bourgogne-Franche-Comté (Agence régionale pour l'environnement et le développement soutenable) ; Fabienne Lapiche-Jaouen.
<https://www.alterrebourgognefranchecomte.org/c/agenda/10604/journee-alterre-sur-le-theme-des-transitions?>
- Emmanuel Prados participated **Fictionnalisation de controverse** in the research-action project FORCCAST. 22 April, 2018, Paris.
- Emmanuel Prados gave a conference at **STMicroelectronics Grenoble** : "Collapse: understanding and accepting the game over of our modern society", Grenoble, France, March 8 2018. Organizers: Philippe Vincent and Violaine Pasini.

TONUS Team

10.3. Popularization

- Philippe Helluy: "Des modèles mathématiques en acoustique des bâtiments" Rencontres mathématiques-architecture. Strasbourg, October 2018.
- Michel Mehrenberger: participation to "Maths-en-Jean".

BIOCORE Project-Team

10.3. Popularization

10.3.1. Articles and contents

- A popularization paper has been published on the study of peach sugar metabolism [64].
- L. Mailleret was a co-author of the press kit “Les conquêtes de l’INRA pour le biocontrôle” [86].
- The activities related to microalgae have generated many articles in national newspapers (Le Monde, Nice Matin, ...), and broadcasts on national TV (France 3). See, for instance, <https://www.nicematin.com/vie-locale/ces-azureens-inventent-223249>.

10.3.2. Interventions

- O. Bernard together with R. Lemée gave a general public conference on the topic “Les microalgues en Méditerranée: quels avènements environnementaux, énergétiques, sanitaires et industriels?” (MA-MAC, Nice, 6 Apr 2018).
- L. Chambon and O. Bara participated in the open doors days of Inria Sophia-Antipolis on the 7th of October. L. Chambon presented a popularization poster about Biocore scientific methodologies to general public.
- L. Chambon represented Biocore, Inria in the national event “Fête de la Science” in Mouans-Sartoux and Juan-les-Pins (13th and 20th of October). She presented scientific popularization games and experiments to children and general public.
- L. Mailleret presented three Posters on biological control with predatory mites during the visit of the national press (AFP, France Inter, Le Parisien,...) at Institut Sophia Agrobiotech on the 30th of May 2018.

CARMEN Project-Team

8.3. Popularization

8.3.1. Internal or external Inria responsibilities

- L. Weynans is responsible for the communication (*Chargé de communication*) of the IMB
- Exhibit at the open days on the occasion of the 10-years anniversary of the Inria center Bordeaux Sud-Ouest.

8.3.2. Interventions

L. Weynans:

- Organization of the day “Filles et Maths, une équation lumineuse”
- Several presentations for high-school students about scientific computing

DRACULA Project-Team

7.3. Popularization

7.3.1. Articles and contents

- L. Pujo Menjouet : interview dans Causette (hors série Juillet-Août 2018)
- L. Pujo Menjouet : interview dans le magazine Society (fin juillet 2018)

7.3.2. Interventions

- T. Lepoutre: Visite de l'inria pour les stagiaires de 3e de l'ICJ (plusieurs fois dans l'année, une matinée en général).
- T. Lepoutre: présentation de l'antenne et des équipes à deux classes lors du congrès Maths en Jeans (mars 2018)
- T. Lepoutre participation to MathaLyon interventions
- L. Pujo Menjouet : participation à Math en Jeans édition 2018 (collège de la côte Roannaise, Renaison)
- L. Pujo Menjouet : présentation de deux conférences au collège de Saint Bonnet le château le 21 juin 2018

M3DISIM Project-Team

10.3. Popularization

J.M. Allain, Co-authored a popularization paper in the “Reflète de la Physique” journal (january-february 2018)

D. Chapelle, Interview in *Sciences et Avenir* (November issue)

M. Genet, Presentation at JeudiX—Research Days at École Polytechnique

C. Patte, Fête des Sciences day, organized by Inria. October 11th

MAMBA Project-Team

10.3. Popularization

10.3.1. Interventions

- Marie Doumic: participation in a round table on December 13th, in Forum Emploi Maths, La Villette, Paris; Participation in a round table on "Science Meets Medicine", May 29th, in Vienna; presentation to a 12-year old class of pupils of mathematics for biology.
- Several Mamba members have taken part to the activities of the year of mathematical biology declared by European Mathematical Society.
- Dirk Drasdo on liver research and EASL: <https://www.inria.fr/centre/paris/actualites/dirk-drasdo-et-ses-recherches-sur-le-foie>

MONC Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- S. Benzekry is a member of the local Inria commission of informatical tools users (CUMI)
- C. Poignard is an elected member of Inria's national evaluation committee.

10.3.2. Interventions

- O. Saut: Fête de la Science, Cap Science, Bordeaux.

NUMED Project-Team (section vide)

REO Project-Team

10.3. Popularization

10.3.1. Interventions

- Céline Grandmont
 - Conference “Métier”: Master Maths students, UPMC, Oct 2018
 - Conference at "Rendez-vous des Jeunes Mathématiciennes et Informatiennes", Inria Oct. 2018
 - High school discussion on scientific career, 18th January, Blanche de Castille, Le Chesnay, France
 - High school conference, 9th January, Blanche de Castille, Le Chesnay, France

SISTM Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

- Mélanie Prague is part of the Inria Commission de Développement Technologique (CDT)
- Mélanie Prague is part of the Inria commission des emplois de recherche.
- Robin Genuer is the webmaster of the publication site of the French statistical society

10.3.2. Articles and contents

- Mélanie Prague participated to an interview for Sud ouest Eco.
- Mélanie Prague made a video of presentation of SISTM team

10.3.3. Interventions

- Chloé Pasin presented "Modélisation et optimisation de la réponse immunitaire" to L3 student from ENS Lyon visiting Inria and Hadrien Lorenzo participated to research speed meetings with these students on December 6 2018.
- Melany Durand, Hadrien Lorenzo, Chloé Pasin and Mélanie Prague participated at the "Fête de la Science" and presented "D'une goutte de sang à ta prochaine visite chez le médecin : bien personnaliser ton traitement" to high school students on October 10 2018.
- Chloé Pasin participated at the "atelier Digit'elles" with the "Femmes and Sciences" organization at the "Fête de la Science" on October 9 2018.

10.3.4. Internal action

- the whole team participated in a showcase of their activity for Inria BSO 10th anniversary on September 27th, 2018 "Une goutte de sang contient-elle plus de données qu'un smartphone ?"
- Marta Avalos and Binbin Xu conducted a workshop on "Vivre la diversité à Inria Bordeaux – Sud-Ouest", within the internal workshop for the Inria BSO 10th anniversary, June 13. Participation to the SO News of June.

XPOP Project-Team

10.3. Popularization

10.3.1. Internal or external Inria responsibilities

Eric Moulines is member of the Evaluation Committee of Inria.

10.3.2. Creation of media or tools for science outreach

Marc Lavielle developed and maintains the learning platform [Statistics in Action](#). The purpose of this online learning platform is to show how statistics (and biostatistics) may be efficiently used in practice using R. It is specifically geared towards teaching statistical modelling concepts and applications for self-study. Indeed, most of the available teaching material tends to be quite "static" while statistical modelling is very much subject to "learning by doing".

Julie Josse (with Nicholas Tierney and Nathalie Vialaneix) developed and maintains the website [R-miss-tastic](#), A resource website on missing data.