Scientific Achievements

Once again this year, an array of scientific projects and results garnered awards and Inria's researchers were singled out for their major contributions to the digital sciences and for their promising innovations that bode well for the future.

Honours

• Nicolas Tabareau, Inria researcher, was selected for an **ERC Starting Grant** by the European Research Council (ERC).

• Vadim Lyubashevsky was awarded an **ERC Starting Grant** to support his project to develop public-key cryptographic systems.

• Steve Kremer, Inria Research Director, received an **ERC Consolidator Grant**.

• Florence Bentil-Descoubes, Inria research fellow, was awarded an **ERC Starting Grant**.

• Gérard Berry, former Inria Research Director and one-time chairman of its Evaluation Committee, has held the first chair in computing at the Collège de France since 2012; he was recently honoured with the **CNRS Gold Medal**.

• Vincent Calvez won an **ERC Starting Grant** that will enable him to pursue his research work on the collective behaviour and movements of bacteria.

• Martin Vohralík, Inria Research Director, was the recipient of an **ERC Consolidator Grant.**

• Paola Goatin was recognised with the I**nria - Academy of Sciences Young Researcher Award** for her research on optimising road traffic and managing crowd movement.

• Inria Research Director Nicholas Ayache holds the Computing and Digital Science Chair at the Collège de France and was awarded the **Inria - Academy of sciences Grand Prix**.

• Maureen Clerc, Inria researcher, received the **Pierre Faurre Prize by the French Academy of Sciences** in recognition of her work on modelling and interpreting electrical signals in the brain.

• Vincent Roca, Inria researcher, received the **FIEEC 2014 Prize** in applied research for his industrial transfer efforts benefiting French SME Expway.

• Wendy Mackay, Inria Research Director, was honoured with the **ACM SIGCHI Lifetime Service Award** for her career spent furthering human-machine interaction.

• The Coq proof management system was awarded the prestigious **2013 Software System Award**, one of the highest distinctions awarded by AMC, the Association for Computing Machinery.

• Christine Morin, Inria Research Director, accepted the **Étoiles de l'Europe** ("Stars of Europe") award in recognition of her Contrail European project, "Open Computing Infrastructures for Elastic Services".

• Rachid Deriche, Research Director and Athena Project Team Manager, received the title of **Honorary Doctor from the University of Sherbrooke**.

• Olivier Faugeras, an iconic Inria researcher, received the **Okawa Prize** for his pioneering contributions in the fields of computer vision and computational neuroscience.

• Simon Labarthe earned the **2014 Le Monde thesis award for**

university research for his efforts in modelling the electrical activity of atriums and pulmonary veins.

• Yvonne Jansen from the Aviz team received the **second Gilles Kahn thesis award** for her thesis, "Physical and Tangible Information Visualization".

• Yves Robert, an algorithmics researcher and renowned international specialist in this field, accepted the **IEEE TCSC Award** in recognition of his work on high performance computing.

• Frédéric Guillou, a PhD student, won the recommender systems **challenge organized by the ACM RecSys conference**.

• François Baccelli won the **2014 ACM Sigmetrics Achievement Award** in recognition of his fundamental contributions to using stochastic geometry to analyse communication networks.
• Two other honours **(IEEE)** were also bestowed on François Baccelli's work.

• Patrick and Radhia Cousot received the **SIGPLAN Achievement Award**.

• Didier Le Botlan and Didier Rémy received the **SIGPLAN Most Influential ICFP Paper Award** for their publication "MLF: Raising ML to the Power of System F".

• François Fages, Inria Research Director, received the **Michel Monpetit Award** for his contributions to fundamental computing and its applications in systems biology.

• Roxana Dumitrescu's doctoral coursework was honoured with the **Award for Collaborative Efforts** given out by the Fondation des Sciences Mathématiques de Paris and CASDEN.

• Pierre Blanc, PhD student, was selected as the **Rising Star in Quantitative Finance**. The award was handed out during the Global Derivatives Conference.

• Sophia Knight received the **2014**

École Polytechnique Thesis Award for her thesis, "An Epistemic Approach to Competition Theory".

• Emmanuel Thomé, Inria research fellow, was awarded the **2014 Regional Researcher award** at the first ever Evening for Higher Education, Research and Science-Society Relations in Lorraine.

• Nina Miolane and Bishesh Khanal won the **"Popular Vote Award"** as part of the MICCAI education challenge for their video, "Statistics on Lie Groups for Computational Anatomy".

• Dale Miller received the **"Test of Time" award** at the LICS conference for a paper published in 1991, "Logic Programming in a Fragment of Intuitionistic Linear Logic".

• Jacques Lévy-Verhel, Inria Regularity team leader, and his colleague, Franklin Mendivil, received the **Paul R. Halmos & Lester R. Ford Award** which honours the best articles published in the journal *The American Mathematical Monthly*.

Best Papers

• Scientists Francis Bach (Sierra project team) and Benoît Perthame (Mamba project team) were listed in the **Thomson Reuters ranking** of the world's highly cited researchers.

• The CARAMEL project team, which works on applied number theory in cryptography, presented its work (conducted in 2013) on breakthroughs in discrete logarithm computing at **2014 EUROCRYPT** and received the

Best Paper Award.

• Michel Raynal, Inria researcher, won the **Best Paper Award** at the ACM Symposium on Principles Of Distributed Computing (PODC).

• The Hybrid project team earned the **Best Paper Award** at the international symposium on 3D user interfaces (3DUI 2014).
• An article written by F. Chazal, L.

Guibas, S. Oudot and P. Skraba was selected as a **Notable Item** by *ACM Computing Reviews in 2013*.

• Amandine Perrin received the **Best Paper and Best Oral Presentation Award** at the international conference ISCB-LA 2014.

• Dominique Béreziat and Isabelle Herlin received the **Best Paper Award** at the International Conference on

Computer Vision Theory and Applications (VISAPP).

• Alexandre Gramfort and his co-authors received the **2014 Best Paper Award** at the PRNI 2014 international workshop.

• Ilya Loshchilov, Marc Schoenauer, Michèle Sebag, and Nikolaus Hansen received the **Best Paper Award** at the 13th edition of the PPSN (Parallel Problem Solving from Nature) international conference.

• Xu Binbin, post-doc, earned a **Best Paper Award** at the IEEE Tensymp 2014 conference. The award recognized the paper, "Complexity Analysis of Experimental Cardiac Arrhythmia".

• Olivier Temam, Inria Research Director, received a **Best Paper Award** at the ASPLOS conference for his research on computer accelerators.

• The Aramis team contributed to the theme issue on "Complex Network Theory and the Brain" in the **prestigious journal Philosophical Transactions of the Royal Society B.**

• Emmanuel Caruyer received the **2013 AFRIF Best Doctoral Thesis Award** at the RFIA 2014 conference for his work on dispersive MRI supervised by Rachid Deriche.

• Pauline Traynard (Lifeware project team) received the **Best Student Paper** award at the 12th International Conference on Computational Methods in Systems Biology (CMSB 2014).

• **Camille Maumet** was recognized by the French Society of Magnetic Resonance in Biology and Medicine (SFRM-BM) for her doctoral thesis.

• The Dolphin project team solved the **three-dimensional quadratic assignment problem** on a computational grid.

• The Mephysto project team developed a general approach to **quantify ergodicity in stochastic homogenization of discrete elliptic equations**.

• The MODAL project team - and ADT MPAGenomics - created the 1st **French instance of Galaxy** (a platform for searching, managing and archiving bioinformatics data)which can be accessed via the French bioinformatics cloud.

Conferences

• The **15th annual congress of the French Society for Operational Research and Decision Making Support (ROADEF)**, organized by the Inria Realopt team, drew over 500 researchers to Université de Bordeaux.

• The Orpailleur team hosted the **13th edition of the ECML/PKDD confe**rence (European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases) from 14 to 19 September 2014. The event was attended by many academics and industrial stakeholders.

• Last July in Nantes, IFTTAR, Inria and Université de Nantes organized the **7th European Workshop on Structural Health Monitoring (EWSHM)** as well as the **2nd European Conference of the Prognostics and Health Management (PHM) Society.**

• The **6th edition of fOSSa**, hosted by Inria and Fing, was held in Rennes in November 2014.

• Inria was a partner of the **12th African Conference on Research in Computer Science and Applied Mathematics (CARI'2014)**. This event,

arranged through international cooperation, brought together African universities, French research centres and international organizations.

• Inria helped to organize the 2014 edition of ICIP, the **International Conference on Image Processing**, which was held for the first time in France, and drew nearly 1,500 people.

• The **4th Innorobo trade show** was held in Lyon in March. Inria, via its Flowers, Lagadic, Non-A and e-Motion teams, presented its progress and work in robotics.