
Mathematics People

Oertel-Jäger Receives von Kaven Award

TOBIAS H. OERTEL-JÄGER of the Technical University of Dresden is the recipient of the 2015 von Kaven Award presented by the Deutsche Forschungsgemeinschaft (DFG, German Science Foundation) for his work in dynamical systems, a field that, according to the prize citation, “ranges from theoretical work to applications in biology and physics. A dynamical system is a concept in mathematics that describes a certain class of models of time-dependent processes, which in synopsis raise very basic issues and are as important when describing many natural and technological processes. Tobias Oertel-Jäger’s fundamental research work is part of the discipline called ergodic theory.”

Oertel-Jäger received his doctorate from the University of Erlangen-Nuremberg in 2005. He was granted a DFG research fellowship for postdoctoral study at the Collège de France in Paris from 2006 to 2009. In 2009 he became head of the Emmy Noether independent junior research group at the Technical University of Dresden, in which he researches topological and geometric aspects and probability theory in dynamical processes.

The von Kaven Award carries a cash prize of 10,000 euros (approximately US\$11,000) and was presented in September 2015 at the annual meeting of the German Mathematical Society (DMV) in Hamburg. The von Kaven Award is presented each year to an outstanding mathematician based in the European Union. The von Kaven Foundation was established in December 2004 by its benefactor, Herbert von Kaven, of Detmold, Germany, and the DFG’s Executive Board.

—From a DFG announcement

Freitas Awarded Rubio de Francia Prize

NUNO FREITAS of the University of Barcelona has been awarded the 2014 Rubio de Francia Prize of the Royal Spanish Mathematical Society (RSME) “for his contributions to number theory, which improve our understanding of Fermat’s equation on real quadratic bodies, those obtained by adding to the rational numbers the square root of a positive integer.” His work with Le Hung and Siksek showing that any elliptic curve on a real quadratic field is modular allowed the proof of Fermat’s Last Theorem by Wiles and represents an important step in demonstrating the modularity conjecture.

The prize honors the memory of J. L. Rubio de Francia (1949–1988), an internationally renowned Spanish analyst. It is awarded annually to a young mathematician from Spain or residing in Spain, and it is the highest distinction given by the RSME. The prize carries a monetary award of 3,000 euros (approximately US\$3,300). The prize jury consisted of Jesús Bastero Eleizalde (chair), Ingrid Daubechies, Timothy Gowers, Subhash Khot, Marco A. López Cerdá, Alvaro Pelayo, and Claire Voisin.

—From a Royal Spanish Mathematical Society announcement

2015 Davidson Fellows Selected

Four high school students whose projects involved the mathematical sciences have been named 2015 Davidson Fellows. NOAH GOLOWICH, seventeen, of Lexington, Massachusetts, was awarded a top prize of a scholarship worth US\$50,000 for his project “Resolving a Conjecture on De-

gree of Regularity, with Some Novel Structural Results.” DHAIVAT PANDYA, seventeen, of Appleton, Wisconsin, also received a US\$50,000 scholarship for his project “Algorithms for Minimum Cost Linear Network Coding Design for Networks with General Connections.” Scholarships worth US\$25,000 were awarded to PETER TIAN, eighteen, of Hilliard, Ohio, for his project “Extremal Functions of Forbidden Multidimensional Matrices,” and to SREYA VEMURI, sixteen, of Carmel, Indiana, for her project “Effect of Time-Dependent Gain and Loss in a PT-Symmetric Lattice.”

The Davidson Fellows program, a project of the Davidson Institute for Talent Development, awards scholarships to students eighteen years of age or younger who have created significant projects that have the potential to benefit society in the fields of science, technology, mathematics, literature, music, and philosophy.

—From a Davidson Fellows announcement

Prizes of the Canadian Mathematical Society

The Canadian Mathematical Society (CMS) will award several prizes at its winter meeting in Montreal in December 2015.

MARK MAC LEAN of the University of British Columbia has been named the recipient of the Adrian Pouliot Award “for his excellence in teaching and contributions to mathematics education in Canada, particularly Aboriginal education.” He has worked with the Pacific Institute for the Mathematical Sciences (PIMS) on several Aboriginal mathematics education projects, including workshops for teachers. He has served as academic director for Jump Start, a program that supports international and First Nations students at the University of British Columbia since 2011. The Pouliot Award recognizes individuals or teams of individuals who have made significant and sustained contributions to mathematics education in Canada.

PHILIPPE GILLE of the Université Claude Bernard has been honored with the G. de B. Robinson Award for his paper “Octonion Algebras over Rings Are Not Determined by Their Norms,” *Canadian Mathematical Bulletin* 57, no. 2 (2014), pp. 303–309. According to the prize citation, “Gille’s paper is an example of how powerful abstract techniques in one area of mathematics can be used to decisively settle long-standing problems in another area.” The award recognizes outstanding contributions to the *Canadian Journal of Mathematics* or the *Canadian Mathematical Bulletin*.

ALEJANDRO ADEM of the University of British Columbia has been awarded the Jeffery-Williams Prize. According to the prize citation, Adem is “one of the world’s leading experts in group cohomology and the geometry of group actions” who “is fascinated by the deep mathematics and beauty associated to symmetry groups, which manifest themselves both in nature and across a variety of scientific disciplines.” He is managing editor of the *Memoirs* and the *Transactions of the American Mathematical Society* and is an AMS Fellow. The prize recognizes mathematicians

who have made outstanding contributions to mathematical research.

The CMS Doctoral Prize has for the first time been awarded to two recipients. YUVAL FILMUS of the University of Toronto was honored for research predominately focused on extremal combinatorics, and HECTOR H. PASTEN VASQUEZ of Queen’s University was honored for his work in number theory and logic. The award recognizes outstanding performance by a doctoral student who graduated from a Canadian university in the preceding year.

—From CMS announcements

Floudas and Grossmann Awarded Carathéodory Prize

CHRISTODOULOS A. FLOUDAS of Texas A&M University and IGNACIO E. GROSSMANN of Carnegie Mellon University have been awarded the Constantin Carathéodory Prize of the International Society of Global Optimization for fundamental contributions to theory, algorithms, and applications of global optimization. Floudas was honored for work in mathematical modeling and optimization of complex systems. Grossmann was recognized for his work in developing novel mathematical programming models and techniques for a variety of problems in process systems engineering. The prize carries a cash award of US\$2,000.

—From an International Society of Global Optimization announcement

Scheinkman Awarded CME-MSRI Prize

JOSÉ SCHEINKMAN of Columbia University has been awarded the 2014 CME-MSRI Prize in Innovative Quantitative Applications of the CME Group and the Mathematical Sciences Research Institute (MSRI). The annual CME Group-MSRI Prize is awarded to an individual or a group to recognize originality and innovation in the use of mathematical, statistical, or computational methods for the study of the behavior of markets and, more broadly, of economics.

—From a CME-MSRI announcement

NDSEG Fellowships Awarded

Nine young mathematicians have been awarded National Defense Science and Engineering Graduate (NDSEG) Fellowships by the Department of Defense (DoD) for 2015. The fellowships are sponsored by the United States Army, Navy, and Air Force. As a means of increasing the number of US citizens trained in disciplines of military importance in science and engineering, DoD awards fellowships to

individuals who have demonstrated ability and special aptitude for advanced training in science and engineering.

Following are the names of the fellows in mathematics, their institutions, and the offices that awarded the fellowships: ZACHARY BOYD, University of California Los Angeles, Office of Naval Research (ONR); NICHOLAS DERR, Harvard University, Air Force Office of Scientific Research (AFOSR); VICTORIA GERSHUNY, University of Arizona, Army Research Office (ARO); MAYA MATHUR, Harvard University, ONR; BRADLEY NELSON, Stanford University, AFOSR; ROBERT RAVIER, Duke University, AFOSR; BEN SOUTHWORTH, University of Colorado, Boulder, ARO; ROBERT TUNNEY, University of California Berkeley, ARO; LEIGHTON WILSON, University of Michigan, Ann Arbor, AFOSR.

—From an NDSEG announcement

Royal Society of Canada Elections

The Royal Society of Canada has elected eighty-seven new Fellows, among whom are three who work in the mathematical sciences. They are CHRISTIAN GENEST of McGill University; MARK LEWIS of the University of Alberta; and CATHERINE SULEM of the University of Toronto.

—From a Royal Society announcement

B. H. Neumann Awards Given

The Australian Mathematics Trust has honored three mathematics teachers with B. H. Neumann Awards for service to the mathematics profession. The honorees are KUMUDINI DHARMADASA, NORMAN DO, and DANIEL MATHEWS. The awards honor Bernhard H. Neumann, who supported mathematics and mathematics teaching at all levels in Australia.

—From an Australian Mathematics Trust announcement

David Hestenes Honored

The Sixth Conference on Applied Geometric Algebras in Computer Science and Engineering (AGACSE 2015, Barcelona, Spain) was dedicated to DAVID HESTENES of Arizona State University “in recognition for his masterly leadership.” This was highlighted by issuing a second edition of his landmark 1966 book *Space-Time Algebra* (fifty years later, but it is as fresh now as it was then!). Hestenes was present during the whole week, and the standing ovation after his keynote lecture was a very moving moment for all participants. The inaugural David Hestenes Prize was awarded to LEI HUANG of the Academy of Science, Beijing, P.R. China, for “the best work submitted to the AGACSE 2015 Conference by a young researcher.” The conference



Photo courtesy of Sebastià Xambó-Descamps.

Left to right: D. Hestenes, L. Huang, S. Franchini, P. Dechant, S. Xambó-Descamps, E. Bayro-Corrochano.

was preceded, for the first time, by a two-day summer school to better prepare beginners for the conference and was attended by two-thirds of the participants. The next conference will be in Campinas, Brazil, in 2018.

—Sebastià Xambó-Descamps, Chair
AGACSE 2015 Organizing Committee

Alphonse Buccino (1931–2015)

ALPHONSE (AL) BUCCINO died July 6, 2015, at the age of eighty-four. Born in New York City to parents who were Italian immigrants, he had to drop out of high school to support his family after the death of his mother. He was drafted to serve in Korea and reached the rank of captain. After his war service, he enrolled at the University of Chicago, where he earned his PhD in 1967 under the direction of Irving Kaplansky. He was a member of the faculty at Roosevelt University and DePaul University before taking a position at the National Science Foundation in 1970. Known for his support of research and education, Buccino became the dean of the University of Georgia’s College of Education. In the early 1990s, he spent a year as an advisor in the White House Office of Science and Technology. Buccino had been an AMS member since 1960.

—Allyn Jackson