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# Mathematics People

## Zhan and Dubedat Awarded 2011 Salem Prize

The Salem Prize 2011 has been awarded to DAPENG ZHAN of Michigan State University and JULIEN DUBEDAT of Columbia University for their outstanding work on the Schramm-Loewner evolutions (SLE), specifically for the proof of the reversibility and duality conjectures. The prize, in memory of Raphael Salem, is awarded yearly to young researchers for outstanding contributions to the field of analysis.

Previous winners of the Salem Prize include the following mathematicians: N. Varopoulos, R. Hunt, Y. Meyer, C. Fefferman, T. Körner, E. M. Nikišin, H. Montgomery, W. Beckner, M. R. Herman, S. B. Bočkarëv, B. E. Dahlberg, G. Pisier, S. Pichorides, P. Jones, A. B. Aleksandrov, J. Bourgain, C. Kenig, T. Wolff, N. G. Makarov, G. David, J. L. Journé, A. L. Vol'berg, J.-C. Yoccoz, S. V. Konyagin, C. McMullen, M. Shishikura, S. Treil, K. Astala, H. Eliasson, M. Lacey, C. Thiele, T. Wooley, F. Nazarov, T. Tao, O. Schramm, S. Smirnov, X. Tolsa, E. Lindenstrauss, K. Soundararajan, B. Green, A. Avila, S. Petermichl, A. Venkatesh, B. Klartag, A. Naor, and N. Anantharaman.

The prize committee consisted of J. Bourgain, C. Fefferman, P. Jones, N. Nikolski, G. Pisier, P. Sarnak, and J.-C. Yoccoz.

—*Salem Prize Committee announcement*

## Nang Awarded Ramanujan Prize for Young Mathematicians from Developing Countries

PHILIBERT NANG of the École Normale Supérieure, Laboratoire de Recherche en Mathématiques, Libreville, Gabon, has been named the winner of the 2011 Ramanujan Prize for Young Mathematicians from Developing Countries in recognition of his contributions to the algebraic theory of  $D$ -modules. According to the prize citation, he has created important classification theorems for equivariant algebraic  $D$ -modules, in terms of explicit algebraic invariants, and his results complement the insights obtained by others using perverse sheaves, thus shedding new light on the Riemann-Hilbert correspondence.

The prize is awarded jointly by the Abdus Salam International Centre for Theoretical Physics (ICTP), the Niels Henrik Abel Memorial Fund, and the International Mathematical Union (IMU). It is awarded annually to a

researcher from a developing country who is less than forty-five years of age and has conducted outstanding research in a developing country. The prize is supported financially by the Niels Henrik Abel Memorial Fund and carries a US\$15,000 cash award. The selection committee for the 2011 prize consisted of Lothar Göttsche (chair), Helge Holden, Maria Jose Pacifico, Vasudevan Srinivas, and Gang Tian.

—*Ramanujan Prize Committee announcement*

## Wohlmuth Awarded Leibniz Prize

BARBARA WOHLMUTH of the University of Technology, Munich, has been awarded the 2012 Leibniz Prize in Mathematics. The prize citation states that she was honored for her research achievements in numerical analysis, which enable direct applications in scientific and engineering computing. A focus of her research is the numerics of partial differential equations, to which she has made key contributions, especially with her theoretical study of mortar domain decomposition methods. With this work, and with its translation into practical techniques, she has achieved an internationally leading role in her field. Wohlmuth's research demonstrates an extraordinarily deep theoretical understanding that also produces better computational methods, for example in solid and fluid mechanics.

The Leibniz Prize is awarded by the German Research Foundation (DFG) and carries a cash award of 2,500,000 euros (approximately US\$3,300,000), which may be used for up to seven years for the recipient's scientific work.

—*From a DFG announcement*

## Todorčević Awarded CRM-Fields-PIMS Prize

STEVO TODORČEVIĆ of the University of Toronto has been awarded the 2012 CRM-Fields-PIMS Prize in mathematical sciences for work of striking originality and technical brilliance. The prize citation reads in part, "His contributions to set theory made him a world leader in this topic with a particular impact on combinatorial set theory and its connections with topology and analysis." He has made major contributions to the study of  $S$ - and  $L$ -spaces in topology, proved a remarkable classification theorem for

transitive relations on the first uncountable ordinal, and made a deep study of compact subsets of the Baire class 1 functions, thus continuing work of Bourgain, Fremlin, Talagrand, and others in Banach space theory. Together with P. Larson he completed the solution of Katětov's old compact spaces metrization problem. Among the most striking recent accomplishments of Todorćević (and coauthors) are major contributions to the von Neumann and Maharam problems on Boolean algebras; the theory of nonseparable Banach spaces, including the solution of an old problem of Davis and Johnson; the solution of a long-standing problem of Laver; and the development of a duality theory relating finite Ramsey theory and topological dynamics.

The prize is awarded by the Centre de Recherches Mathématiques (CRM), the Fields Institute, and the Pacific Institute for Mathematical Sciences (PIMS).

—From a CRM announcement

## Gualtieri and Kim Awarded 2012 Aisenstadt Prize

MARCO GUALTIERI of the University of Toronto and YOUNG-HEON KIM of the University of British Columbia have been awarded the 2012 André-Aisenstadt Prize of the Centre de Recherches Mathématiques (CRM). Gualtieri made essential contributions to the development of generalized complex geometry, an active area of research at the interface of complex geometry and symplectic geometry. Kim's most important contributions concern the fast-developing topic of optimal transportation.

—From a CRM announcement

# Mathematics Opportunities

## DMS Workforce Program in the Mathematical Sciences

The Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) welcomes proposals for the Workforce Program in the Mathematical Sciences. The long-range goal of the program is increasing the number of well-prepared U.S. citizens, nationals, and permanent residents who successfully pursue careers in the mathematical sciences and in other NSF-supported disciplines. Of primary interest are activities centered on education that broaden participation in the mathematical sciences through research involvement for trainees at the undergraduate through postdoctoral educational levels. The program is particularly interested in activities that improve recruitment and retention, educational breadth, and professional development.

The submission period for unsolicited proposals is **May 15–June 15, 2012**. For more information and a list of cognizant program directors, see the website [http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=503233](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503233).

—From a DMS announcement

## Project NExT: New Experiences in Teaching

Project NExT (New Experiences in Teaching) is a professional development program for new and recent Ph.D.'s

in the mathematical sciences (including pure and applied mathematics, statistics, operations research, and mathematics education). It addresses all aspects of an academic career: improving the teaching and learning of mathematics, engaging in research and scholarship, and participating in professional activities. It also provides the participants with a network of peers and mentors as they assume these responsibilities. In 2012 about eighty faculty members from colleges and universities throughout the country will be selected to participate in a workshop preceding the Mathematical Association of America (MAA) summer meeting, in activities during the summer MAA meetings in 2012 and 2013 and the Joint Mathematics Meetings in January 2013, and in an electronic discussion network. Faculty for whom the 2012–2013 academic year will be the first or second year of full-time teaching (post-Ph.D.) at the college or university level are invited to apply to become Project NExT Fellows.

Applications for the 2012–2013 Fellowship year will be due **April 13, 2012**. For more information, see the Project NExT website, <http://archives.math.utk.edu/projnxt/>, or contact Aparna Higgins, director, at [Aparna.Higgins@notes.udayton.edu](mailto:Aparna.Higgins@notes.udayton.edu). Project NExT is a program of the MAA. It receives major funding from the Mary P. Dolciani Halloran Foundation and additional funding from the Educational Advancement Foundation, the American Mathematical Society, the American Statistical Association, the National Council of Teachers of Mathematics, the Association for Symbolic Logic, the W. H. Freeman Publishing Company, John Wiley & Sons, MAA Sections, and the Greater MAA Fund.

—Project NExT announcement