Mathematics People

Bressan Awarded Feltrinelli Prize

ALBERTO BRESSAN of Pennsylvania State University has been selected to receive the Antonio Feltrinelli Prize in Mathematics, Mechanics, and Applications of the Accademia Nazionale dei Lincei. The prize carries a monetary award of 65,000 euros (approximately US$82,000), a certificate, and a gold medal.

Bressan has done important research in nonlinear analysis, differential equations, and control theory. He is best known for his breakthrough work in hyperbolic conservation laws, in which he established the uniqueness and other fundamental properties of solutions and the convergence of vanishing viscosity approximations.

The Accademia Nazionale dei Lincei, founded in 1603, is considered to be Italy's most prestigious scientific society. One of its first members was Galileo Galilei. The Feltrinelli Prize is among the highest awards given to Italian citizens for achievements in the arts, music, literature, history, philosophy, medicine, and physical and mathematical sciences. The prize is awarded in the area of physical and mathematical sciences only once every five years. Among the previous winners have been Francesco Tricomi, Guido Stampacchia, and Enrico Bombieri.

—From a Pennsylvania State University announcement

Tao Awarded 2006 SASTRA Ramanujan Prize

The 2006 SASTRA Ramanujan Prize will be awarded to TERENCE TAO of the University of California, Los Angeles. This annual prize, which was launched in 2005, is for outstanding contributions to areas of mathematics influenced by the genius Srinivasa Ramanujan. The age limit for the prize has been set at thirty-two, because Ramanujan achieved so much in his brief life of thirty-two years. The US$10,000 prize will be awarded at the International Conference on Number Theory and Combinatorics, December 19–22, 2006, at SASTRA University in Kumbakonam, India, Ramanujan's hometown.

The 2006 prize citation is as follows: "Terence Tao is awarded the 2006 SASTRA Ramanujan Prize for his path-breaking contributions in number theory, harmonic analysis, representation theory, and partial differential equations, which have had a major impact in combinatorics and ergodic theory as well. Among other things, the prize recognizes his notable contributions to the famous Kakeya Problem in higher dimensions, which has major applications in Fourier analysis and partial differential equations, especially his joint work with Nets Katz, Izabella Laba and others, that significantly improves all previously known estimates for the fractal dimension using new and surprisingly simple combinatorial ideas in an ingenious way. The prize also recognizes his outstanding joint work with Ben Green on long arithmetic progressions of prime numbers, in particular, the resolution of the long-standing conjecture that there are arbitrarily long arithmetic progressions of prime numbers, by brilliantly combining methods of ergodic theory with the ideas of Tim Gowers. In addition, the prize recognizes Tao's joint work with Jean Bourgain and Nets Katz in generalizing a fundamental problem of Erdős and Szemeredi on the sumsets and product sets of integers, by developing a 'sum-product theory' that has led to breakthroughs in harmonic analysis and number theory. The prize also makes note of Tao's fundamental work on wave maps that figure prominently in Einstein's general theory of relativity, the new insights that he and his collaborators provided in the study of Schrödinger equations, and the resolution of the saturation conjecture in representation theory in collaboration with Allen Knutson."

Tao was born in Adelaide, Australia, in 1975 and lived there until 1992. He did his B.Sc. (Honours) and M.Sc. at Flinders University of South Australia. He then went to Princeton University in 1992 for his Ph.D., which he completed in 1996 under the direction of Elias Stein. He

received a Sloan Dissertation Fellowship for the final year of his Ph.D. work. He is currently professor at the University of California in Los Angeles. He received the Salem Prize (2000), the AMS Bôcher Prize (2002), and the AMS Conant Prize (2005). In 2006 he received a Fields Medal as well as a MacArthur Fellowship.

The 2006 SASTRA Ramanujan Prize Committee consisted of: Krishnaswami Alladi (chair), George Andrews, Manjul Bhargava, James Lepowsky, Tom Koornwinder, Kannan Soundararajan, and Michel Waldschmidt.

—From a SASTRA Ramanujan Prize announcement

Faddeev, Ruelle, and Witten Awarded Poincaré Prizes

The International Association of Mathematical Physics (IAMP) has awarded the 2006 Henri Poincaré Prizes for mathematical physics to LUDVIG D. FADDEEV of the Steklov Institute of Mathematics, St. Petersburg, and the Euler International Mathematical Institute; DAVID RUELLE of the Institut des Hautes Études Scientifiques, Bures-sur-Yvette; and EDWARD WITTEN of the Institute for Advanced Study, Princeton. Faddeev was honored for his contributions to the theory of quantum fields, quantization of noncommutative gauge theories, scattering in quantum mechanics and quantum field theory, and the theory of integrable systems. Ruelle was cited for his contributions to quantum field theory, to both classical and quantum statistical mechanics, and to dynamical systems theory. Witten was honored for his work on string theory, which has also influenced geometry and topology. Each prize carries a cash award of 10,000 euros (approximately US$12,000).

The Poincaré Prize, which is sponsored by the Daniel Iagolnitzer Foundation, recognizes outstanding contributions that set the foundation for novel developments in mathematical physics. The prize is awarded every three years. The 2006 prizes were presented at the International Congress on Mathematical Physics in Rio de Janeiro.

—From an IAMP announcement

2006 Information-Based Complexity Young Researcher Award

JAKOB CREUTZIG of Technische Universität Darmstadt, Germany, and DIRK NUYENS of Katholieke Universiteit, Leuven, Belgium, have been awarded the Information-Based Complexity (IBC) Young Researcher Award for 2006. The award is given for significant contributions to information-based complexity by a young researcher who has not reached his or her thirty-fifth birthday by September 30 in the year of the award. The award carries a cash prize of US$1,000 and a plaque.

The award committee consisted of Josef Dick, University of New South Wales; Frances Kuo, University of New South Wales; Christiane Lemieux, University of Calgary; Friedrich Pillichshammer, University of Linz; Joseph F. Traub, Columbia University; and Henryk Wozniakowski, Columbia University and University of Warsaw.

—Joseph F. Traub

DMV Prizes

The Deutsche Mathematiker-Vereinigung (DMV, German Mathematical Society) awarded prizes at a meeting in Bonn in September 2006.

HANS FÖLLMER of the Humboldt-Universität Berlin received the DMV Cantor Medal. Föllmer is the leading German probability theorist of his generation. He has had a decisive influence on the development of the field of stochastics, especially stochastic analysis and applications to financial markets. Previous recipients of the Cantor Medal are Friedrich Hirzebruch, Yuri Manin, Volker Strassen, Jacques Tits, Erhard Heinz, Jürgen Moser, and Karl Stein.

GEORGE SZPIRO received the DMV Media Prize of 4,000 euros (approximately US$5,000) for his monthly column in the Swiss newspaper *Neue Zürcher Zeitung*. The column presents a wide range of mathematical themes that Szpiro has carefully researched and written up. He regularly succeeds in making complex mathematical ideas accessible and enjoyable to a wide public. His columns have been collected into two books, *Mathematics for Sunday Morning* (2005) and *Mathematics for Sunday Afternoon* (2006), both available in English.

ULF VON RAUCHHAUPT received the DMV Journalism Prize for his article "Professor Gödel und der Wahrheit (Professor Gödel and Truth)", which appeared in the *Frankfurter Allgemeine Sonntagszeitung* on April 23, 2006. The article, written on the occasion of the 100th anniversary of the birth of Kurt Gödel, describes how his ideas shook the foundations of mathematics.

The DMV also recognized the contributions of HANS MAGNUS ENZENSBERGER to mathematical popularization. Enzensberger, a prominent German poet and essayist, presented a much-admired lecture at the International Congress of Mathematicians in Berlin in 1998 about the role of mathematics in culture. The lecture, *Zugbrücke Ausser Betrieb*, was published as a booklet in German with facing English translation by A K Peters. Enzensberger has also written a children's book, *The Number Devil* (1999), which has appeared in both German and English.

—Allyn Jackson