

---

# Mathematics People

## Chelkak Awarded 2014 Salem Prize

DMITRY CHELKAK of the Steklov Institute of Mathematics, St. Petersburg, and the ETH Institute for Theoretical Studies has been awarded the 2014 Salem Prize. According to the prize citation, he was honored “for his contributions to establishing scaling limits and proving their conformal invariance and universality for interfaces and lattice fields in the two-dimensional critical Ising model, which confirmed predictions, originating in theoretical physics, and also led to new precise results. The developed methods include discrete analytical estimates in Ahlfors–Beurling style, probabilistic/combinatorial arguments and spinor structures.”

The prize, given in memory of Raphael Salem, is awarded yearly to young researchers for outstanding contributions to the field of analysis. The prize committee for the 2014 prize consisted of J. Bourgain, C. Fefferman, P. Jones, N. Nikolski, G. Pisier, P. Sarnak, and J.-C. Yoccoz.

—From a Salem Prize Committee announcement

## Rabinowitz Awarded Schauder Prize

PAUL H. RABINOWITZ of the University of Wisconsin-Madison has been awarded the 2014 Schauder Medal of the Juliusz P. Schauder Center for Nonlinear Studies at the Nicolaus Copernicus University in Toruń, Poland. The prize citation reads in part: “Perhaps more than anyone else, Paul Rabinowitz deeply influenced the field of nonlinear analysis, becoming a true inheritor of the mathematical legacy of Juliusz Schauder. The famous global bifurcation theorem, the mountain pass, the linking and saddle theorems, results concerning the existence of periodic solutions to Hamiltonian systems, variational methods in the theory of critical points of strongly indefinite

functional under the absence of compactness conditions of the Palais–Smale type are only some of achievements of Paul Rabinowitz which have found their place in the history of mathematics.” The Schauder Medal is awarded to individuals for their significant achievements related to topological methods in nonlinear analysis.

—From a Schauder Center announcement

## Freiberger Retires from QAM after 50 Years

In 1965, Walter Freiberger of Brown University became the managing editor of the *Quarterly of Applied Mathematics* (*QAM*), the first applied mathematics journal to be established in the United States. In November of last year, Freiberger stopped by the Providence, RI, headquarters of the AMS to check the proofs for the last issue of the *Quarterly* he would oversee. His fifty years at the helm of the journal must be something of a record.

“The *Quarterly* has had a long history of publishing excellent research in applied mathematics, and this success is in no small part due to the dedication of Walter Freiberger,” said AMS Executive Director Donald McClure. “In his five decades as managing editor, he made a tremendous contribution both to the mathematical sciences community and to the AMS. His long-standing service is greatly appreciated.”

Published by Brown University and distributed by the AMS, *QAM* has had a long association with the Society. The journal was founded in 1943 by William Prager, a German mathematician who had been recruited to Brown University by its then-dean, R. G. D. Richardson. Richardson served as secretary of the AMS and also contributed to the establishment of *Mathematical Reviews*.

Walter Freiberger served in the Australian Army from 1943 until 1945. He studied mathematics at Melbourne University, receiving his BA in 1947 and MA in 1949. In 1953, he earned his PhD at Cambridge University, under the

direction of G. I. Taylor. After three years back in Australia, he was recruited to the Division of Applied Mathematics (DAM) at Brown University where he met and married Brown biology student Christine Holmberg, with whom he has three sons, Christopher, Andrew, and Nils.

At Brown he eventually came to chair the DAM, a position he held for six years. His research interests, for which he was awarded Fulbright and Guggenheim Fellowships, have included continuum mechanics, scientific computation, and problems in statistical inference, as well as statistical problems in public health and in molecular biology. In addition to his service for *QAM*, Freiburger was instrumental in starting modern scientific computing at Brown and founding the Center for Statistical Science in the Medical School.

—Allyn Jackson

## Kołodziej and Ohsawa Receive Bergman Prize

ŚLAWOMIR KOŁODZIEJ of the Jagiellonian University and TAKEO OHSAWA of Nagoya University have received the 2014 Stefan Bergman Prize. Established in 1988, the prize recognizes mathematical accomplishments in the areas of research in which Stefan Bergman worked. Kołodziej and Ohsawa will equally share US\$245,598, which is the 2014 income from the Stefan Bergman Trust.

The previous Bergman Prize winners are: David W. Catlin (1989), Steven R. Bell and Ewa Ligocka (1991), Charles Fefferman (1992), Yum Tong Siu (1993), John Erik Fornæss (1994), Harold P. Boas and Emil J. Straube (1995), David E. Barrett and Michael Christ (1997), John P. D’Angelo (1999), Masatake Kuranishi (2000), László Lempert and Sidney Webster (2001), M. Salah Baouendi and Linda Preiss Rothschild (2003), Joseph J. Kohn (2004), Elias M. Stein (2005), Kengo Hirachi (2006), Alexander Nagel and Stephen Wainger (2007-2008), Ngaiming Mok and Duong H. Phong (2009), Gennadi Henkin (2011), David Jerison and John M. Lee (2012), and Xiaojun Huang and Steve Zelditch (2013).

On the selection committee for the 2014 prize were Rafe Mazzeo, Alexander Nagel, and Duong Phong.



Takeo Ohsawa

### Citation: Takeo Ohsawa

Takeo Ohsawa is recognized for his deep contributions to the theory of the  $\bar{\partial}$ -equation leading to precise  $L^2$ -estimates for extensions of holomorphic functions from submanifolds of a complex manifold. His work has led to important advances in a wide variety of areas, including local structure of pluri-subharmonic functions,

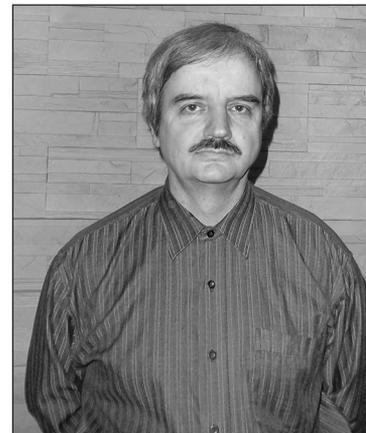
invariance of plurigenera, multiplier ideal sheaves, and estimates for the Bergman kernel.

### Biographical Sketch: Takeo Ohsawa

Takeo Ohsawa is a professor at Nagoya University. He got his PhD from Kyoto University in 1981. He was at the Research Institute for Mathematical Sciences in Kyoto as an assistant professor and as an associate professor (1978–1990), and then he moved to Nagoya in 1991 as a full professor. He was in Göttingen (1980–81) and in Wuppertal (1981–82) as a stipendiary of the Alexander von Humboldt Foundation. His invited lectures include a talk at the International Congress of Mathematicians in Kyoto (1990) and a plenary talk at the annual meeting of the Mathematical Society of Japan (1996). He has been on the editorial board of the *Journal of Mathematical Society of Japan* (2009–15).

### Citation: Sławomir Kołodziej

Sławomir Kołodziej is recognized for his seminal contributions to the complex Monge–Ampère equation and pluripotential theory, including necessary and sufficient conditions for the existence of bounded solutions, stability, and other sharp estimates. His works have had profound ramifications in complex geometry, in particular on singular Kähler–Einstein metrics and on the Kähler–Ricci flow.



Sławomir Kołodziej

### Biographical Sketch: Sławomir Kołodziej

Sławomir Kołodziej was born in Bielsko-Biała, Poland, in 1961. He received his PhD in 1989 at the Jagiellonian University in Kraków, under the supervision of Professor J. Siciak (who was once invited as postdoc to Stanford by S. Bergman). Kołodziej has been working at Jagiellonian University since then. He obtained the professor (state) title in 2005. He was an invited speaker at 6th European Congress of Mathematics, which took place in Kraków in 2012. He was awarded the S. Zaremba Prize of the Polish Mathematical Society in 1999 and was twice awarded the Prime Minister of Poland Prize, once for the best habilitation and the second time for a scientific achievement. He is currently a vice president of the Polish Mathematical Society.

### About the Prize

The Bergman Prize honors the memory of Stefan Bergman, best known for his research in several complex variables, as well as the Bergman projection and the Bergman kernel function that bear his name. A native of Poland, he taught at Stanford University for many years and died in 1977 at the age of 82. He was an AMS member for 35 years. When

his wife died, the terms of her will stipulated that funds should go toward a special prize in her husband's honor.

The AMS was asked by Wells Fargo Bank of California, the managers of the Bergman Trust, to assemble a committee to select recipients of the prize. In addition the Society assisted Wells Fargo in interpreting the terms of the will to assure sufficient breadth in the mathematical areas in which the prize may be given. Awards are made every one or two years in the following areas: (1) the theory of the kernel function and its applications in real and complex analysis; and (2) function-theoretic methods in the theory of partial differential equations of elliptic type with attention to Bergman's operator method.

—Allyn Jackson

## Clay Research Fellows 2015

The Clay Mathematics Institute is pleased to announce that James Maynard and John Pardon have been appointed Clay Research Fellows. James Maynard received his PhD in 2013 from the University of Oxford under the supervision of Roger Heath-Brown and is currently a Fellow by Examination at Magdalen College, Oxford. James is primarily interested in classical number theory, in particular the distribution of prime numbers. His research focuses on using tools from analytic number theory, particularly sieve methods, to study primes. James has been appointed as a Clay Research Fellow for a term of three years beginning 1 July 2015. John Pardon will receive his PhD in 2015 from Stanford University under the supervision of Yakov Eliashberg. His most recent work concerns the construction of virtual fundamental cycles on moduli spaces of holomorphic curves in symplectic geometry. He is also interested in geometry and low-dimensional topology. John received his AB in Math from Princeton University in 2011. John has been appointed as a Clay Research Fellow for a term of five years beginning 1 July 2015. For more information, visit [www.claymath.org](http://www.claymath.org).

# HINDUSTAN BOOK AGENCY

## SELECTED PAPERS OF V. S. VARADARAJAN

VOLUMES 2 AND 3

Donald G. Babbitt and Ramesh Gangolli, K. R. Parthasarathy, *Indian Statistical Institute, New Delhi, India*, Enrico G. Beltrametti and Gianni Cassinelli, *University of Genova, Italy*, Rita Fioresi, *Università di Bologna, Italy*, and Anatoly N. Kochubei, *National Academy of Sciences of Ukraine, Kiev, Ukraine*, Editors

The current volumes contain the papers on fundamental questions of individual and families of meromorphic differential equations that are treated by a new group theoretic and functional approach; papers on representation theory of Lie groups; papers on foundations of physics, supersymmetry, and P-adic aspects of quantum physical theories; papers on analysis, especially oscillatory integrals, on semi-simple Lie groups, their conjugacy classes, and their flag manifolds; and finally, several review articles, both personal and mathematical, on a number of the above topics.

**Hindustan Book Agency**; 2013; 1366 pages; Hardcover; ISBN: 978-93-80250-57-1; List US\$165; AMS members US\$132; Order code HIN/65

## ANALYSIS I

THIRD EDITION

Terence Tao, *University of California, Los Angeles*

This is part one of a two-volume introduction to real analysis and is intended for honours undergraduates who have already been exposed to calculus. The material starts at the very beginning—the construction of the number systems and set theory—then goes on to the basics of analysis, through to power series, several variable calculus and Fourier analysis, and finally to the Lebesgue integral. The entire text is deeply intertwined with exercises and (omitting some less central topics) can be taught in two quarters of twenty-five to thirty lectures each.

In the third edition, several typos and other errors have been corrected and a few new exercises have been added.

**Hindustan Book Agency**; 2014; 368 pages; Hardcover; ISBN: 978-93-80250-64-9; List US\$50; AMS members US\$40; Order code HIN/66

## ANALYSIS II

THIRD EDITION

Terence Tao, *University of California, Los Angeles*

This is part two of a two-volume introduction to real analysis and is intended for honours undergraduates who have already been exposed to calculus. The material starts at the very beginning—the construction of the number systems and set theory—then goes on to the basics of analysis, through to power series, several variable calculus and Fourier analysis, and finally to the Lebesgue integral. The entire text is deeply intertwined with exercises and (omitting some less central topics) can be taught in two quarters of twenty-five to thirty lectures each.

In the third edition, several typos and other errors have been corrected and a few new exercises have been added.

**Hindustan Book Agency**; 2014; 236 pages; Hardcover; ISBN: 978-93-80250-65-6; List US\$40; AMS members US\$32; Order code HIN/67

Publications of Hindustan Book Agency are distributed within the Americas by the American Mathematical Society. Maximum discount of 20% for all commercial channels.



**Order Online:**  
[www.ams.org/bookstore](http://www.ams.org/bookstore)

**Order by Phone:**  
(800)321-4267 (U.S. & Canada),  
(401)455-4000 (Worldwide)