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# Mathematics People

## Dirac Medals Awarded

The International Center for Theoretical Physics (ICTP) in Trieste, Italy, has awarded the 1997 Dirac Medals to PETER GODDARD of the University of Cambridge and DAVID OLIVE of the University College of Swansea.

Goddard and Olive were recognized for “their farsighted and highly influential contributions to theoretical physics, over an extended period. [They] have contributed many crucial insights that have shaped our emerging understanding of string theory and have also had a far-reaching impact on our understanding of four-dimensional field theory.”

Peter Goddard’s work on quantization of the relativistic string (with J. Goldstone, C. Rebbi, and C. Thorn) showed definitively that dual resonance models should be understood as string theories. David Olive’s work on spacetime supersymmetry of the spinning string theory (with F. Gliozzi and J. Scherk) made possible the whole idea of superstrings, which we now understand as the most natural framework for supersymmetry and string theory.

Goddard and Olive introduced key ideas about the use of current algebra in string theory which were very important in the subsequent discovery of attractive ways to incorporate spacetime gauge symmetry in string theory, thus making it possible for string theory to incorporate the standard model of particle physics.

These discoveries, made in the years 1973–83, were among the most crucial steps in making possible the ‘superstring revolution’ of 1984–85. The second superstring revolution of the last few years has been equally dependent on pioneering insights about magnetic monopoles made in 1977 by Goddard, Olive, and J. Nuyts, and further extended by Olive and C. Montonen. Their ideas concerning a dual interpretation of magnetic charge, and then about electric-magnetic duality in non-abelian gauge theory, were way ahead of their time and proved to have a far-reaching importance, which we are only now beginning to understand, in governing the dynamics of four-dimensional field theory and of superstring theory.

The ICTP instituted the Paul Adrien Maurice Dirac Medals in 1985. These medals are awarded yearly for contributions to theoretical physics and mathematics. The announcement

is made on P. A. M. Dirac’s birthday (August 8), and the awarding ceremony takes place at a later date at the ICTP. The medalists also receive a check for \$5,000.

An international committee of distinguished scientists selects the winners from among nominated candidates. The committee invites nominations from anyone working in the areas of theoretical physics or mathematics. (The Dirac Medal is not awarded to Nobel Prize or Wolf Foundation Prize winners.) For information, consult the ICTP Web site, <http://www.ictp.trieste.it>.

—ICTP press release

## Ferran Sunyer i Balaguer Prize Awarded

The Institut d’Estudis Catalans has awarded the sixth Ferran Sunyer i Balaguer Prize to JUAN J. MORALES RUÍZ of the Universitat Politècnica de Catalunya for his monograph entitled *Differential Galois Theory and Non-integrability of Hamiltonian Systems*. The monograph is devoted to the connection between the two topics mentioned in the title: differential Galois theory and integrability of Hamiltonian systems. The main point is the relation between integrability in the Liouville-Arnold sense of a Hamiltonian system and the Galois differential integrability of the associated variational equations.

The prize consists of 1,800,000 pesetas (approximately \$12,400). According to the terms of the prize, the monograph will be published in the Birkhäuser series Progress in Mathematics. The Ferran Sunyer i Balaguer Prize is awarded each year to a mathematical monograph of an expository nature presenting the latest developments in an active area of mathematics research in which the author(s) has (have) made important contributions.

Note: For information on how to submit manuscripts for consideration for the prize, see the “Mathematics Opportunities” section in this issue of the *Notices*.

—from Institut d’Estudis Catalans announcement

## Parzen Prize Awarded

The 1998 Emanuel and Carol Parzen Prize for Statistical Innovation has been awarded to BRADLEY EFRON of Stanford University for "outstanding and influential innovations and breakthroughs in theoretical research in mathematical statistics, and effective applications of theoretical research. Professor Efron has made many pioneering fundamental contributions to bootstrap and computer intensive statistical methods, empirical Bayes methods, survival analysis, clinical trials, differential geometry, likelihood theory, and survey sampling."

The Parzen Prize is awarded in even-numbered years by the Department of Statistics at Texas A&M University. It is awarded to North American statisticians who have made outstanding and influential contributions to the development of applicable and innovative statistical methods. The 1998 Parzen Prize Committee members were: David Brillinger, Herman Chernoff, Joe Newton, Grace Wahba, and Marvin Zelen.

Nominations for the year 2000 Parzen Prize should be submitted (by October 1, 1999) to H. J. Newton, Department of Statistics, Texas A&M University, College Station, TX 77843-3143.

—Department of Statistics,  
Texas A&M University announcement

## National Academy of Engineering Elections

The National Academy of Engineering has announced the election of 84 new members and 7 foreign associates. Among those elected were ARTHUR M. GEOFFRION of the University of California, Los Angeles; EDWARD J. MCCLUSKEY of Stanford University; ROBERT J. McELIECE of the California Institute of Technology; DAVID MIDDLETON, an independent consultant in New York City; NEIL J. A. SLOANE, of AT&T Laboratories; and MARY F. WHEELER, of the University of Texas, Austin.

—National Academy of Engineering announcement

## Karp Receives Harvey Prize

RICHARD KARP of the University of Washington has been awarded this year's Harvey Prize by the Technion-Israel Institute of Technology for his outstanding contributions to the field of computer science. The prize comes with a cash award of \$35,000 and the opportunity to lecture at the Technion.

The Harvey Prize was established in 1972 by the late Leo M. Harvey of Los Angeles, a supporter of the American Technion Society, the support organization for the Technion in the United States. The prize honors major contributions to human progress in science, technology, literature of the Middle East, and the advancement of peace

in the Middle East. The fund has been maintained by his son, Homer, and the Harvey family. Three Harvey Laureates have received the Nobel Prize since 1990.

—from news release of the American Society for  
Technion-Israel Institute of Technology

## Visiting Mathematicians

### (Supplementary List)

Mathematicians visiting other institutions during the 1998–2000 academic years were listed in the June/July 1998 issue of the *Notices*, pp. 730–731. The following is an update to that list (home country is listed in parentheses).

VICTOR GUBA (Russia), Vanderbilt University, Algebra, Group Theory, 1/99–5/99.

ERVIN GYÖRI (Hungary), Vanderbilt University, Graph Theory, 1/99–5/99.

SANG-EON HAN (Korea), University of Rochester, Mathematics, 2/99–1/00.

UWE F. MAYER (Germany), Vanderbilt University, Partial Differential Equations, Differential Geometry, 5/98–8/98.

LASSI PAIVARINTA (Finland), University of Delaware, Inverse Problems, 9/98–1/99.

ROLAND POTTHAST (Germany), University of Delaware, Inverse Problems, 10/98–11/98.

HENDA SWART (South Africa), Vanderbilt University, Graph Theory, 9/98–12/98.

JOHN SWART (South Africa), Vanderbilt University, Differential Equations, 9/98–12/98.

ALDO URSINI (Italy), Vanderbilt University, Algebra, 9/98–9/98.

## Deaths

HELEN E. CLARKSON, of Omaha, Nebraska, died on April 20, 1998. Born on January 11, 1914, she was a member of the Society for 60 years.

BERNARD DWORK, of Princeton University, died on May 9, 1998. Born on May 27, 1923, he was a member of the Society for 48 years.

JAMES R. C. LEITZEL, of the University of New Hampshire, died on February 25, 1998. Born on May 27, 1936, he was a member of the Society for 38 years.

MICHIO SUZUKI, of the University of Illinois at Urbana-Champaign, died on May 31, 1998. Born on October 2, 1926, he was a member of the Society for 44 years.