Mathematics People

Lusztig Receives Brouwer Medal

GEORGE LUSZTIG of the Massachusetts Institute of Technology has received the 1999 Brouwer Medal of the Dutch Mathematical Society (Wiskundig Genootschap). He received the gold medal and presented a one-hour lecture "A Survey of Group Representations" at the 1999 annual meeting of the Dutch Mathematical Society.

Wilberd van der Kallen, chair of the selection committee for the 1999 Brouwer Medal, presented the laudatio for the prize. The laudatio says that the prize was given for Lusztig's "many deep and influential contributions to representation theory." In particular, the following three achievements were cited:

1. The construction with Deligne of what are now called Deligne-Lusztig characters (*Ann. of Math.*, 1976) and Lusztig's ensuing project to classify all the characters of finite reductive groups (cf. Lusztig's 1984 book).

2. The invention with Kazhdan (*Invent. Math.*, 1979) of what are now called Kazhdan-Lusztig polynomials and the many conjectures and theorems that link them to different parts of representation theory.

3. The construction of quantum groups over the integers and the construction of canonical bases (for classical representations of simple complex Lie groups) and their positivity properties (cf. Lusztig's 1993 book). Lusztig's recent work on totally positive matrices belongs in this context.

The Brouwer Medal was established by the Dutch Mathematical Society and the Royal Netherlands Academy of Sciences in honor of the Dutch mathematician L. E. J. Brouwer (1881–1966). Every three years the society chooses a topic and then selects a Brouwer Lecturer for that area. The area selected for 1999 was algebra (not including number theory or algebraic geometry). The Brouwer Medal is the most prestigious award in mathematics in the Netherlands.

Previous recipients of the Brouwer Medal are: R. Thom (topology, 1970), A. Robinson (foundations, 1973), A. Borel (Lie groups, 1978), H. Kesten (probability theory, 1981), J. Moser (analysis, 1984), Yu. I. Manin (number theory, 1987), W. M. Wonham (control theory, 1990), L. Lovász (discrete mathematics, 1993), and W. Hackbush (numerical mathematics, 1996).

—Allyn Jackson

Cuntz Receives 1999 Leibniz Prize

JOACHIM CUNTZ of Universität Münster has received the 1999 Gottfried Wilhelm Leibniz Prize. The Leibniz Prize is one of Germany's most prestigious awards for outstanding scientists. The prize provides a five-year research grant of 1.5 million DM (about $800,000).

Joachim Cuntz

The work of Joachim Cuntz has its roots in functional analysis, more precisely, the theory of C^*-algebras and their K-theory. He has made substantial contributions to the structure theory of C^*-algebras and to G. G. Kasparov's KK-theory. Together with Daniel Quillen, Cuntz has been a driving force in the development of cyclic cohomology, a fundamental homological-algebraic structure underpinning K-theory and Alain Connes's noncommutative geometry.

Joachim Cuntz was born in 1948 in Mannheim, Germany. He studied mathematics and physics in Heidelberg and Paris and obtained his doctorate from Universität Bielefeld in 1975. He received his *habilitation* at the Technische Universität Berlin in 1977. He held positions in Berlin and Heidelberg and at the University of Pennsylvania in Philadelphia before taking a position as a full professor at Université de Provence in Marseilles in 1984. In 1988 he became a full professor at Universität Heidelberg. Since 1997 Cuntz has been a full professor at Universität Münster.

The Leibniz Prize was established in 1985 to improve the working conditions of outstanding scientists in Germany, to increase their research opportunities, to reduce their administrative workloads, and to enable them

to recruit exceptional young scientific researchers. Ten scientists received Leibniz Prizes for 1999. Each prize winner receives a five-year research grant consisting of 3 million DM for those working in experimental areas and 1.5 million DM for those working in theoretical areas. The prize winners have a great deal of freedom in using the prize funds.

The Leibniz Prizes are awarded by the Deutsche Forschungsgemeinschaft (the counterpart in Germany of the U.S. National Science Foundation) and are financed by special funds provided by federal and state governments in Germany. For the 1999 competition about 180 proposals were submitted by higher education institutions, Germany's Max Planck Society, and previous Leibniz Prize winners.

—Allyn Jackson

1999 Prize for Achievement in Information-Based Complexity

The first winner of the Prize for Achievement in Information-Based Complexity is ERICH NOVAK of the University of Erlangen-Nürnberg. He was cited for "numerous outstanding contributions to information-based complexity." The award, consisting of $3,000 and a plaque, was presented at an awards ceremony during the Foundations of Computational Mathematics Conference in Oxford, England, in July 1999.

—Joseph F. Traub

Presidential Awards for Mentoring

Two programs involved with the mathematical sciences have been chosen as recipients of the 1999 Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring. They are the Science and Mathematics Investigative Learning Experience (SMILE) at Oregon State University, directed by Susan J. Borden, and the Douglass Project for Women in Mathematics, Science, and Engineering at Rutgers University, directed by Joseph J. Seneca.

The Presidential Awards for Excellence are administered and funded through the National Science Foundation (NSF). The awards recognize outstanding individual efforts and organizational programs designed to increase the participation of underrepresented groups in mathematics, engineering, and science from kindergarten through twelfth grade and on through the graduate level. Up to ten individuals and ten institutions annually may qualify for the award, which includes a $10,000 grant and a commemorative presidential certificate.

—From an NSF announcement

Cowen Named Bunting Scholar

LENORE J. COWEN of Johns Hopkins University has been selected as a Fellow for the 1999–00 academic year at the Mary Ingraham Bunting Institute of Radcliffe College. Cowen's research interests include probabilistic combinatorics, extremal combinatorics, graph algorithms, graph theory, and the curse of dimensionality in statistics. She will deliver a Colloquium Lecture at the Institute in April 2000 on the topic "Approximating High-Dimensional Datasets: New Algorithms for Finding Patterns in Complex Information".

The Bunting Institute is a multidisciplinary research center for women scholars, scientists, artists, and writers and provides one of the major fellowship programs for the support of women doing advanced study in the United States.

—From a Bunting Institute announcement

Petzold Awarded Dahlquist Prize

LINDA R. PETZOLD of the University of Minnesota has been awarded the third Germund Dahlquist Prize by the Society for Industrial and Applied Mathematics (SIAM). The award citation for Petzold reads in part: "for her important contribution to effective numerical methodology for differential equations, especially the analysis of methods for differential-algebraic equations, the construction of effective techniques for their solution, and the integration of these and other techniques into robust software, thus making possible the reliable solution of large classes of ordinary and partial differential equations arising from engineering and science applications."

The Dahlquist Prize was established in 1995 to be awarded to a young scientist (normally under forty-five years old) for original contributions to fields associated with Germund Dahlquist, especially the numerical solution of differential equations and numerical methods for scientific computing. The prize carries a cash award of approximately $1,000 and is given every two years. Previous winners of the Dahlquist Prize are J. M. Sanz-Serma (1995) and Andrew M. Stuart (1997). The next award is planned for 2001.

—From a SIAM announcement

Pi Mu Epsilon Awards Student Prize

The AMS sponsors an annual prize that is awarded by Pi Mu Epsilon, the national honorary mathematics society. The prize was initiated in 1989 in honor of PME's seventy-fifth anniversary. PME administers the prize and uses it to recognize the best student papers presented at a PME student paper session. Each recipient of the AMS Award for Out-

standing Pi Mu Epsilon Student Paper Presentation receives a check for $150. Following is a list of the recipients of the awards that were made at the joint Mathematical Association of America-PME Student Conference in Providence, Rhode Island, July 31–August 2, 1999.

The winning speakers were ROBIN DRIESNER, Southern Illinois University; JEFFREY DUMONT, Lafayette College; SANJAI KUMAR GUPTA, University of North Carolina, Chapel Hill; BEN JANTSON, Youngstown State University; SARA LALUMIA, Youngstown State University; TERESA SELEE, Youngstown State University; LIBBY WIEBEL, St. Norbert College.

—From a Pi Mu Epsilon announcement

Visiting Mathematicians

(Supplementary List)

Mathematicians visiting other institutions internationally during the 1999–2000 academic years were listed in the August 1999 issue of the *Notices*, pp. 807–809. The following is an update (home country is listed in parentheses).

V. BARBU (Romania), Ohio University, Partial Differential Equations and Optimal Control, 3/00–6/00.

BORIS BEKKER (Russia), Central Michigan University, Combinatorics, 9/99–5/00.

J. BRENNAN (U.S.A.), Centre de Recerca Matematica, Spain, Analysis, 4/00–5/00.

R. BRUNNER (U.S.A.), Centre de Recerca Matematica, Spain, Algebraic Topology, 1/00–3/00.

C. BURDZY (U.S.A.), Centre de Recerca Matematica, Spain, Stochastic Analysis, 6/00–7/00.

JUNESANG CHOI (Korea), University of Victoria, British Columbia, Analytic Number Theory, Special Functions, 9/99–8/00.

Y. HU (U.S.A.), Centre de Recerca Matematica, Spain, Stochastic Analysis, 6/00–7/00.

G. W. MACKEY (U.S.A.), Centre de Recerca Matematica, Spain, Algebra, 3/00.

MARGARET READDY (U.S.A.), Stockholm University, Sweden, Algebraic Combinatorics, 9/99–5/00.

D. SCHLOMIUK (Canada), Centre de Recerca Matematica, Spain, Dynamical Systems, 1/00–4/00.

S. SEHGAL (Canada), Centre de Recerca Matematica, Spain, Algebraic Topology, 2/00–3/00.

SHENGWENG WANG (China), Central Michigan University, Operator Theory, 9/99–5/00.

HONGGUO XU (China), Case Western Reserve University, Numerical Methods and Numerical Analysis, 8/99–5/00.

Deaths

NORMAN G. GUNDERSON, professor emeritus at the University of Rochester, NY, died on September 5, 1999. Born on May 29, 1917, he was a member of the Society for 58 years.

WILLIAM M. LAMBERT, of Montes de Oca, Costa Rica, died on August 8, 1999. Born on April 6, 1936, he was a member of the Society for 38 years.

NICHOLAS C. METROPOLIS, Senior Fellow Emeritus at Los Alamos National Laboratory, died on October 17, 1999. Born on June 11, 1915, he was a member of the Society for 37 years.

GOTTFRIED T. RUTTIMANN, professor at the University of Bern, Switzerland, died on October 11, 1999. Born on April 20, 1941, he was a member of the Society for 24 years.

KARIM SEDDIGHI, professor at Shiraz University, Iran, died on May 11, 1999. Born on April 4, 1950, he was a member of the Society for 21 years.

DIETRICH H. VOELKER, professor emeritus at Clarkson University, Potsdam, NY, died on August 31, 1999. Born on November 8, 1911, he was a member of the Society for 34 years.