
Mathematics People

Kac and Moody Receive Wigner Medal

At the 20th Colloquium on Group Theoretical Methods in Physics, held in July 1994 in Osaka, Japan, VICTOR KAC of the Massachusetts Institute of Technology and ROBERT MOODY of the University of Alberta were named co-winners of the Wigner Medal.

Though they did not work together, Kac and Moody independently and simultaneously began in 1967 a series of papers developing the theory of a new class of infinite-dimensional Lie algebras. Since then, the most important class of such algebras has been called “Kac-Moody algebras”. “This was quite an event, because here was a whole new class of Lie algebras,” notes Morton Hamermesh, professor emeritus of physics at the University of Minnesota and a member of the committee awarding the medal. “It caught the imagination of physicists because there are so many ways it could be applied to physics.”

An overview of the impact of Kac-Moody algebras on physics—particularly particle physics, field theory, and string theory—is given in the article by L. Dolan in this issue of the *Notices*.

Previous recipients of the Wigner Medal are Eugene Wigner and Valentine Bargmann in 1978, Israil M. Gel'fand in 1980, Yuval Ne'eman in 1982, Louis Michel in 1984, Feza Gursey in 1986, I.M. Singer in 1988, F. Iachello in 1990, and J. Wess and B. Zumino in 1992. The prize consists of a gold medal, on one side of which is a likeness of Wigner, and on the other an inscription describing the work for which the prize was given. Eugene Wigner, for whom the medal is named, was a major figure in the development of quantum mechanics, including the use of group theory in quantum mechanical problems. A recipient of the 1963 Nobel Prize for Physics, Wigner died on the first of this year (see the obituary by A.S. Wightman in the July 1995 issue of the *Notices*, pages 769-771).

Biography of Victor Kac

Victor Kac was born on December 19, 1943, in Buguruslan, USSR. He received his bachelor's and master's degrees (both in 1965) and his doctorate (1968) from Moscow State

University. He was on the faculty of the Moscow Institute of Electronic Engineering from 1968 to 1976. In 1977, he went to the Massachusetts Institute of Technology, where he is currently professor of mathematics. Professor Kac has presented lectures in conferences around the world, including the following: International Congress of Mathematicians (Helsinki, 1978),



Victor Kac

AMS Annual Meeting (San Antonio, 1980), the symposium “The Mathematical Heritage of E. Cartan” (Lyon, 1984), the symposium “Mathematics into the Twenty-first Century” (organized in celebration of the AMS Centennial in Providence, 1988), and “Lezioni Leonardesche” (Milan, 1991).

Professor Kac gave a series of lectures at Collège de France in 1981, Montecatini Terme in Italy in 1982, Research Institute for Mathematical Sciences in Kyoto in 1984 and 1991, Academia Sinica in Beijing in 1985, Tata Institute in Bombay in 1986, Scuola Normale in Pisa in 1991, École Normale Supérieure in Paris in 1993, La Falda in Argentina in 1994, and other institutions. Professor Kac was awarded a Sloan Fellowship in 1981 and a Guggenheim Fellowship

in 1986. He has published two books and over one hundred papers. His major areas of research are invariant theory, infinite-dimensional Lie algebras and groups, and quantum groups.

Biography of Robert Moody

Robert Vaughan Moody was born on November 28, 1941, in Great Britain. He received his B.A. from the University of Saskatchewan (1962), and his M.A. (1964) and Ph.D. (1966) from the University of Toronto. He went to Saskatchewan as an assistant professor in 1966 and became a full professor in 1976. In 1989, he moved to the University of Alberta. He



Robert Moody

has held visiting positions at a number of institutions, including New Mexico State University (1967-68), University of Bonn (1973-74), University of Paris VI (1979), and Tata Institute in Bombay (1987).

In 1978, Professor Moody held the Coxeter-James Lectureship. He was elected to the Royal Society of Canada in 1980

and a year later received a fellowship from the Japan Society for the Promotion of Science. He was the 1995 Jeffrey-Williams Lecturer on the occasion of the Canadian Mathematical Society's fiftieth anniversary celebrations. He has served on a number of scientific advisory boards and panels and has also served on the Editorial Board of the *Canadian Journal of Mathematics*, *Communications in Algebra*, the *Canadian Mathematics Bulletin*, and the *Nova Journal of Algebra and Geometry*.

The author of four books and nearly fifty research papers, Professor Moody has worked primarily in the areas of Lie groups and algebras and representation theory. More recently his interests have been directed towards the mathematics of aperiodic order, particularly aperiodic crystals.

— Allyn Jackson

VPW Awards Announced

The National Science Foundation sponsors the Visiting Professorships for Women (VPW) in order to enhance the visibility of women scientists and engineers in academia. This program supports visiting professorships in educational institutions whereby women scientists and engi-

neers conduct research and carry out mentorship activities.

Among the current awardees in the VPW program are two in the mathematical sciences. CORA SADOSKY of Howard University will visit the University of California, Berkeley, and the Mathematical Sciences Research Institute during 1995-96. Her area of research is harmonic analysis and operator theory in product spaces. ZHANG-SUN HONG of Clemson University will visit Louisiana State University during 1995-96. Her area of research is the waveform relaxation method.

—Allyn Jackson

Minority Fellowships Awarded

One hundred outstanding minority scholars have been awarded fellowships in the 1995 Ford Foundation fellowships programs, administered by the National Research Council. The programs provide fellowships in all areas of science, engineering, and the humanities. Awards are made to beginning graduate students, to graduate students writing their dissertations, and to postdoctoral researchers.

Three beginning graduate students in the mathematical sciences received fellowships. DAVID A. BROWN will study algebra at Cornell University, JOHN M. CLEVELAND will study algebra at the University of Michigan, and ANITA MARENO will study applied mathematics at Cornell University.

— from NRC News Release

Erratum

An announcement about awards made in the National Science Foundation (NSF) Graduate Fellowships program appeared in the October 1995 issue of the *Notices*. The announcement gave incorrect information about the institution of graduate study for the following fellowship awardees: Nathan Michael Dunfield, Christopher Perkins French, Ilya Gluhovsky, Jing Rebecca Li, and Jason M. Rioridan. They are all planning to attend the University of Chicago, not the University of Illinois at Chicago, as was reported in the announcement. Readers should also be reminded that the information supplied by the NSF and reproduced in the *Notices* announcement gives the institutions of graduate study that fellows listed on their original applications; in some cases students change institutions after applying.

— Allyn Jackson