California, Berkeley. He also is chair of the advanced microscopy department in the Lawrence Berkeley National Laboratory's physical biosciences division. A purse of $20 000 accompanies the award.

The annual NAS Award in Chemical Sciences is going this year to **Robert G. Parr**, Wassily Hoeffding Professor of Chemical Physics at the University of North Carolina at Chapel Hill. He is honored for "being a pioneer, leader, and central figure in the development of density functional theory in chemistry and for his deep insights into quantum chemical calculations." He is receiving a medal and $15 000 cash prize.

"Pioneering contributions and ingenuity in the creative design and development of photonic materials and devices" have earned **Yoel Fink**, Thomas B. King Assistant Professor of Materials Science at MIT, the NAS Award for Initiatives in Research. This annual prize, worth $15 000, recognizes innovative young scientists.

Donald G. Truhlar is honored with the NAS Award for Scientific Reviewing, presented annually, for his "incisive reviews on transition-state theory, potential energy surfaces, quantum scattering theory, and solvation models, which have informed and enlightened the chemical physics community for a generation." Truhlar, Lloyd H. Reyerson Professor of Chemistry, Chemical Physics, and Scientific Computation, and director of the Supercomputing Institute at the University of Minnesota, Minneapolis, also receives a cash prize of $10 000.

NAS is presenting **Vera C. Rubin**, senior fellow with the Carnegie Institution of Washington's Department of Terrestrial Magnetism, with the James Craig Watson Medal, awarded every three years, for her "seminal observations of dark matter in galaxies, large-scale relative motions of galaxies, and for generous mentoring of young astronomers, men and women." Rubin is receiving a medal and cash prize of $25 000 plus $25 000 to support her research.

APS to Grant Awards at Meeting

The American Physical Society will recognize the achievements of 17 individuals at its annual April meeting, scheduled for 1 to 4 May in Denver, Colorado.

The Hans A. Bethe Prize will go this year to **Wick Haxton**, professor of physics and director of the Institute for Nuclear Theory at the University of Washington. Haxton is being honored for his "noteworthy contributions and scientific leadership in the field of neutrino astrophysics, in particular for his success in merging nuclear theory with experiments and observations in nuclear physics and astrophysics."

George F. Bertsch will take home the Tom W. Bonner Prize in Nuclear Physics for his "many varied contributions to nuclear structure and reaction theory, which have guided and illuminated experiments for four decades." Bertsch is a professor of physics and a senior fellow at the Institute for Nuclear Theory at the University of Washington.

The Dannie Heineman Prize for Mathematical Physics, given jointly by APS and the American Institute of Physics, will be presented to **Gabriele Veneziano**, senior staff member at CERN. He is being recognized for his "pioneering discoveries in dual resonance models which, partly through his own efforts, have developed into string theory and a basis for the quantum theory of gravity."

The Julius Edgar Lilienfeld Prize will go to **H. Jeff Kimble**, Valentine Professor and professor of physics at Caltech. He is being cited for his "pioneering work in quantum optics, for his innovative experiments in single-atom optical experiments, and for his skill in communicating the scientific excitement of his research to a broad range of audiences."

Arie Bodek has been selected to receive the W. K. H. Panofsky Prize in Experimental Particle Physics for his "broad, sustained, and insightful contributions to elucidating the structure of the nucleon, using a wide variety of probes, tools, and methods at many laboratories." Bodek chairs the department of physics and astronomy at the University of Rochester.

Ikaros Bigi and **Anthony I. Sanda** will share the J. J. Sakurai Prize for Theoretical Particle Physics for their "pioneering theoretical insights that pointed the way to the very fruitful experimental study of *CP* violation in B decays, and for continuing contributions to the fields of *CP* and heavy flavor physics." Bigi is a professor of theoretical high-energy physics at the University of Notre Dame in Notre Dame, Indiana, and Sanda is a professor of physics at Nagoya University in Nagoya, Japan.

The corecipients of the Robert R. Wilson Prize for Achievement in the Physics of Particle Accelerators are **Katsunobu Oide** and **John Seeman**. They are being cited for their "technical leadership and direct contributions to the development of high-luminosity B-factories at KEK and SLAC. These machines have set new world records for luminosities in colliding-beam storage rings." Oide is division head of the KEKB Accelerator at the National Laboratory for High Energy Physics (KEK) in Tsukuba, Japan, and Seeman is the assistant director of the technical division and heads the accelerator department at SLAC.

Juan Maldacena, professor of physics at the Institute for Advanced Study in Princeton, New Jersey, will receive the Edward A. Bouchet Award for "providing a deeper understanding of the correspondence between string theory in d space-time dimensions and Yang–Mills theory in $d-1$ dimensions, and for communicating fundamental principles of theoretical physics to the general public, including Spanish-speaking audiences."

The Joseph A. Burton Forum Award will go to **Peter Zimmerman** for his "outstanding and sustained contributions during his years of service in academia and government to improved public understanding of both nuclear and strategic arms control issues." Zimmerman is professor and chair of science and security and directs the MacArthur Centre for Science and Security Studies at King's College, London.

Suzanne T. Staggs will be honored with the Maria Goeppert-Mayer Award for her "original and lasting contributions to experimental cosmology, in particular in the area of cosmic microwave background studies, and for leadership in multi-institutional collaborations to measure CMB anisotropy." Staggs is an associate professor of physics at Princeton University.

Marc Ross, professor emeritus of physics at the University of Michigan, Ann Arbor, will receive the Leo Szilard Lectureship Award for his "many rigorous, elegant, fearless, and influential analyses of the automobile's energy use, emissions, and crashworthiness that have inspired two generations of policy physicists."

The Dissertation in Nuclear Physics Award will go to **Andrew W. Steiner**, postdoctoral research associate at the University of Minnesota, Minneapolis. He is being cited for his "in-depth studies of the phase structure of dense matter containing quarks, neutrino–quark interactions, superconductivity in quark matter, and in particular for the delineation of the neutrino signals which are likely to reveal the structural components of dense matter." His thesis was written under the guidance of Madappa Prakash at SUNY Stony Brook.

Shahram Rahatlou, postdoctoral fellow at the University of California, San Diego, will receive the Mitsuyoshi Tanaka Dissertation Award in Experimental Particle Physics for his "role in the development of the tools needed for the analysis of B-factory data, including the tFIT program, a unique and comprehensive fitting framework for time-dependent analyses." According to the citation, the tools he developed "played a key role" in the observation, by the BaBar Collaboration, of *CP* violation in the B systems, and his work is "essential" to the ongoing program of work as the B-factories continue to probe the origins of *CP* violation. His thesis adviser was Vivek A. Sharma at UCSD.

The Leroy Apker Award for undergraduate research in a PhD-granting institution will go to **Peter Onyisi** for his thesis entitled "Looking for New Invisible Particles." Onyisi is now a graduate student in high-energy experimental physics at Cornell University. Henry Frisch at the Enrico Fermi Institute and the University of Chicago supervised his work.

The recipient of the 2004 Outstanding Doctoral Thesis Research in Beam Physics Award had not been announced at press time.

OSA Presents Engineering Excellence Awards

At a meeting of the Optical Society of America, held last October in Tucson, Arizona, the society bestowed its Engineering Excellence Awards on the following individuals.

Paul R. Dumas, applications engineering manager at QED Technologies, in Rochester, New York, was acknowledged by the society for his "significant contributions to the development, automation, and commercialization of magnetorheological finishing."

Alan H. Gnauck, distinguished member of technical staff at Lucent Technologies' Bell Labs in Murray Hill, New Jersey, was praised by OSA for his "numerous achievements in the development of high-speed, ultra-high-capacity lightwave systems including the first Terabit/s system demonstration."

Mark E. Lowry, photonics group leader at Lawrence Livermore National Laboratory, was chosen by the society for his "leadership in the development of innovative photonic instrumentation and in the development of revolutionary network architectures including the use of tunable DWDM [dense wavelength division multiplexing] techniques in optical metro networking systems."

L. Ramdas Ram-Mohan, professor of physics and of electrical and computer engineering at Worcester Polytechnical Institute, in Worcester, Massachusetts, was recognized by OSA for his "development of advanced algorithms to optimize design methods for mid-IR quantum well lasers, for advancing the paradigm of wavefunction engineering, and for mentoring students in optoelectronics."

AGU Announces Writing Awards

The American Geophysical Union recently presented its science writing awards for 2003, which recognize the achievements of three journalists.

The David Perlman Award for Excellence in Science Journalism—News went to **Charles Petit**, senior writer for *US News & World Report*. He was honored by AGU for "Perilous Waters: A Climate Surprise May Be Brewing in the North Atlantic," an article he wrote for the 1 April 2002 issue of that magazine.

The Walter Sullivan Award for Excellence in Science Journalism—Features was shared by producer **Patric Senson** and senior producer **Jim Handman** of *Quirks and Quarks*, a Canadian Broadcasting Corp radio show. They were acknowledged for a segment entitled "The Science of Climate Change," which aired on 16 November 2002. The broadcast can be heard at http://radio.cbc.ca/quirks/archives/02-03/nov16.html.

IEEE Names Winner of Top Medal

The Institute of Electrical and Electronics Engineers will present its highest award, the IEEE Medal of Honor, to **Tadahiro Sekimoto** at its annual honors ceremony this June in Kansas City, Missouri.

According to IEEE, the medal is presented to an individual who has made a particular contribution that "forms a clearly exceptional addition to the science and technology of concern to the institute." Sekimoto is being recognized for his "contributions to digital communications, promotion of information technology R&D, and technical and corporate leadership in computers and communications." Former chairman of the NEC Corp in Tokyo, he is chairman of the Institute for International Socio-Economic Studies, an NEC think tank, also located in Tokyo. The award includes a gold medal.

In Brief

In a ceremony this spring at his official residence, president of Mexico Vicente Fox is presenting **Constantino Tsallis** with the 2003 Mexico Prize for Science and Technology, which includes a medal and a cash prize of 440 000 Mexican pesos (about $40 000). Tsallis, who heads the department of condensed matter and statistical physics at the Brazilian Center for Research in Physics in Rio de Janeiro, is being cited for his proposal of, and work on, the generalization of the Boltzmann–Gibbs statistical mechanics. The award is given annually by the Mexican government to one person from the Caribbean, Central or South America, Portugal, or Spain (Mexico is excluded) "of recognized professional prestige who has significantly contributed to universal scientific knowledge or to technological advances or to the development of the social sciences."

Chris Walter joined Duke University's physics department in January as an assistant professor; he is starting a new neutrino physics group with **Kate Scholberg**. Walter previously was a research assistant professor in the physics department at Boston University. Scholberg will arrive in September to take her post as assistant professor on the Duke faculty, leaving her position as Mitsui Career Development Professor at MIT.

At a ceremony in London in January, **Edouard Brézin**, who is a member of the Laboratoire de Physique Théorique at the Ecole Normale Supérieure, received this year's President's Medal from the UK's Institute of Physics. The award acknowledged his "distinguished international reputation in theoretical physics, and his leadership of science" as chairman of the physics department of the Ecole Normale Supérieure (1986–91), chairman of the board of CNRS (1992–2000), and in his present posts as vice-president of the Académie des Sciences and president of the French Physical Society.

David Grier joined New York University in December as a professor of physics and became the inaugural