

WE HEAR THAT

London Prize to be Presented in Japan

Russell J. Donnelly, Allen M. Goldman, and Walter N. Hardy will receive the Fritz London Prize in Low Temperature Physics this August in Hiroshima. The prize is awarded every three years at the International Conference on Low Temperature Physics.

Donnelly, a professor of physics at the University of Oregon in Eugene, is being recognized for his "contribution to low-temperature fluid dynamics, in particular for his work on superfluid turbulence and for his use of critical helium gas in the study of thermal convection at record high Rayleigh numbers."



DONNELLY

Goldman is being honored for his "contributions to the physics of superconductors, particularly the discovery of the gapless collective modes, and for his inventive work on superconductor-insulator transitions in ultrathin films." He is an Institute of Technology Distinguished Professor at the University of Minnesota, Twin Cities.



GOLDMAN

Hardy is being acknowledged for his "contributions in atomic and

solid hydrogens and for the elucidation of the d -wave pairing state of the high- T_c superconductor YBCO [yttrium barium copper oxide]. He is a professor of physics at the University of British Columbia in Vancouver.

The cash award of \$21 000 will

be divided equally among the three winners.

NAS Honors Achievements

Fourteen individuals received awards from the National Academy of Sciences at a ceremony held in Washington, DC, in April. The winners included the following six, who work in the physical sciences.

NAS presented the Arctowski Medal, awarded every three years, to **Roger K. Ulrich**, a professor of physics and astronomy at UCLA. He was acknowledged for "recognizing the solar five-minute oscillations as acoustic modes in the solar interior and systematically developing both the theory and the observations to establish today's precise standard model of the solar interior." He received a medal and a cash prize of \$20 000, plus \$60 000 to go to an institution of his choice.

Wallace S. Broecker, Newberry Professor of Earth and Environmental Sciences at the Lamont-Doherty Earth Observatory of Columbia University, won the Arthur L. Day Prize and Lectureship, which is awarded every three years and comes with a cash prize of \$20 000. He was recognized for his "uniquely evocative, creative voice that has fundamentally changed the way we think about the role of oceans in the climate system."

The NAS Award in Applied Mathematics and Numerical Analysis, given every three years, went to **Heinz-Otto Kreiss** for his "seminal contribution to the understanding of differential and difference equations and for his many outstanding contributions to numerical analysis, fluid dynamics, and meteorology." A professor of mathematics at UCLA, he received a cash award of \$10 000.

The NAS Award for Initiatives in Research was bestowed on **Deborah S. Jin**, a physicist with NIST in Boulder, Colorado, for her "experimental realization and characterization of a new quantum system, the vapor-phase degenerate Fermi gas." She received a cash prize of \$15 000 with this award, which is presented annually.

Daniel Kleppner will deliver the Robertson Memorial Lecture, which is

given every three years to a scientist who is invited to lecture on his or her work and its international implications. The Lester Wolfe Professor of Physics at MIT, Kleppner was acknowledged for his "leadership in merging the research fields of atomic physics, quantum degenerate systems, and low-temperature physics." The award carries a cash prize of \$10 000.

NAS presented the G. K. Warren Prize to **Gary Parker** for "rigorous analysis based on fundamental physical principles and laboratory experiments markedly advancing our understanding of sediment transport, river morphology, and channel behavior." An Institute of Technology Distinguished Professor in the civil engineering department at the University of Minnesota in Minneapolis, Parker received a \$10 000 cash prize with the award, which is given every four years.

Canadian Research Institute Honors Young Scientists

To mark its 20th anniversary, the Canadian Institute for Advanced Research (CIAR) will present its Young Explorers Prize this month at a ceremony in Victoria, British Columbia, to the top 20 science and engineering researchers aged 40 and younger working in Canada. The winners will confer with CIAR researchers at the event to discuss the major intellectual questions and challenges of the next 20 years. Of the winners this year, 11 individuals are involved in physics or physics-related research.

The winners include **Matthew Choptuik**, a professor of physics and astronomy at the University of British Columbia in Vancouver; **Janet A. W. Elliott**, an associate professor in the chemical and materials engineering department at the University of Alberta; **Peter Grütter**, an associate professor of physics at McGill University in Montreal; **Eric A. Hessel**, a professor in the physics and astronomy department at York University in Toronto; and **Victoria Kaspi**, an associate professor of physics at McGill.

Other recipients of the award are

Daniel Lidar, an associate professor of theoretical chemical physics at the University of Toronto; **Ian Manners**, a professor of chemistry at the University of Toronto; **Ravi Menon**, a professor of medical biophysics at the University of Western Ontario; **Jerry X. Mitrovica**, the J. Tuzo Wilson Professor of Geophysics at the University of Toronto; **Edward "Ted" Sargent**, a professor in the electrical and computer engineering department at the University of Toronto; and **Andrew Weaver**, a professor in the school of Earth and ocean sciences at the University of Victoria.

Each winner will receive a cash prize of Can\$2000 (about \$1300).

NAE Elects New Members

In February, the National Academy of Engineering announced the names of its 74 new members and 7 new foreign associates. Among those joining the ranks of NAE who work in physics-related fields are

William F. Banholzer, vice president of global technology for GE Plastics in Pittsfield, Massachusetts

Frank S. Bates, the Distinguished McKnight University Professor and head of the chemical engineering and materials science department at the University of Minnesota

C. Jeffrey Brinker, a professor of chemical and nuclear engineering at the University of New Mexico and a senior scientist in the inorganic materials chemistry division at Sandia National Laboratories

Joe C. Campbell, the Cockrell Family Regents Chair in Engineering at the University of Texas at Austin

Subrata K. Chakrabarti, president of Offshore Structure Analysis Inc in Plainfield, Illinois

Douglas M. Chapin, principal officer and director of MPR Associates Inc in Alexandria, Virginia

Andrew R. Chraplyvy, director of lightwave systems research at Bell Laboratories, Lucent Technologies, in Holmdel, New Jersey

Joseph M. Colucci, president of Automotive Fuels Consulting Inc in Clarkston, Michigan

Henry Cox, chief scientist and senior vice president of Orincon Corporation International in Arlington, Virginia

Robert E. Dickinson, a professor in the school of Earth and atmospheric sciences at Georgia Tech

Farouk El-Baz, a professor and the director of the Center for Remote

Sensing at Boston University

Robert E. Fontana Jr., a research staff member at the IBM Almaden Research Center in San Jose, California

Thomas E. Graedel, a professor of industrial ecology, chemical engineering, and geophysics at Yale University

Ronald K. Hanson, Woodard Professor and chair of the mechanical engineering department at Stanford University

Alan J. Heeger, a professor of physics and materials at the University of California, Santa Barbara

Evelyn L. Hu, a professor of electrical and computer engineering and of materials at UCSB

James C. Keck, the Ford Professor of Engineering Emeritus and senior lecturer in the mechanical engineering department at MIT

Chung K. Law, the Robert H. Goddard Professor in the mechanical and aerospace engineering department at Princeton University

Alan G. MacDiarmid, the Blanchard Professor of Chemistry at the University of Pennsylvania

Bernard S. Meyerson, an IBM fellow and vice president of IBM Microelectronics at the Thomas J. Watson Research Center in Yorktown Heights, New York

Gérard A. Mourou, the A. D. Moore Distinguished University Professor of Electrical Engineering and Computer Science at the University of Michigan

Cherry A. Murray, senior vice president of research strategy, physical sciences, and wireless research at Bell Labs, Lucent Technologies, in Murray Hill, New Jersey

Gordon C. Osbourn, a laboratory fellow and team leader of vision science, pattern recognition, and multi-sensor algorithms at Sandia National Laboratories

David W. Thompson, chairman and chief executive officer of Orbital Sciences Corp in Dulles, Virginia

Warren M. Washington, a senior scientist and head of the climate change research section at the National Center for Atmospheric Research in Boulder, Colorado

Donald C. Winter, president and chief executive officer of TRW Systems in Reston, Virginia.

The new foreign associates include the following:

Vladimir E. Fortov, director of the Institute for High Energy Density at the Russian Academy of Sciences in Moscow

J. David Embury, a professor in

the materials engineering department at McMaster University in Hamilton, Ontario, Canada.

IN BRIEF

France A. Córdova, an astrophysicist and vice chancellor for research at the University of California, Santa Barbara, will become chancellor of UC Riverside on 1 July. She replaces **Raymond L. Orbach**, who was sworn in this past March as the director of the US Department of Energy's Office of Science (see PHYSICS TODAY, May 2002, page 26). Before coming to UCSB in 1996, Córdova was chief scientist at NASA.

John Iliopoulos will become the first recipient of the Bodossaki Foundation's Aristeio Bodossaki Prize when it is awarded this month at a ceremony in Athens, Greece. Iliopoulos, director of research with the theoretical physics laboratory at the Ecole Normale Supérieure in Paris, is being honored for his "outstanding contributions to the theory of interactions of elementary particles." The award is accompanied by a cash prize of €150 000 (about \$134 000).

At its annual meeting last month in Penticton, British Columbia, the Canadian Astronomical Society presented the Carlyle S. Beals Award for 2002 to **John D. Landstreet**, a professor in the physics and astronomy department at the University of Western Ontario. The award is given every two years for outstanding achievement in research to a Canadian astronomer or an astronomer working in Canada. Landstreet's research focuses on the study of magnetic field structure and surface chemical element distributions and on efforts to detect directly the local line profiles in very sharp-lined A and B stars.

Every three years, the Dutch Mathematical Society chooses an important field in mathematics and, with the Royal Netherlands Academy of Arts and Sciences, awards the Brouwer Memorial Medal to an individual in that field. This year's medal, which recognizes the field of mathematical physics, was presented in April to **Michael Aizenman**, a professor who holds a joint appointment in the physics and mathematics departments at Princeton University. He was acknowledged as an "outstanding mathematical physicist, who has made many fundamental, far-reaching, powerful, and elegant