

EGS gave the Vilhelm Bjerknes Medal to **Fedor Mesinger**, praising him “as a leading expert in the field of numerical modeling of the atmosphere” and acknowledging “his contributions to numerical weather prediction.” Mesinger is a scientific visitor with the US National Centers for Environmental Prediction’s environmental modeling center in Camp Springs, Maryland, and an adjunct staff member of the physics of weather and climate group at the Abdus Salam International Centre for Theoretical Physics in Trieste, Italy.

The John Dalton Medal went to **Keith John Beven**, a professor of hydrology and fluid dynamics at Lancaster University in the UK, for “his outstanding contributions to the understanding of hydrological processes and hydrological modeling.”

Dan Rosbjerg was honored with the Henry Darcy Medal for “his outstanding contributions to the analysis of extreme hydrological processes and their engineering implications.” He is director of the groundwater research center at the Technical University of Denmark in Lyngby.

The Milutin Milankovic Medal went to **John E. Kutzbach** for “his pioneering and outstanding contributions toward the understanding of the response of the climate system to astronomical forcing using three-dimensional ocean-atmosphere models.” Kutzbach is director of the center for climatic research within the Institute for Environmental Studies at the University of Wisconsin-Madison. He also is a professor of atmospheric and oceanic sciences at the university.

Jürgen Willebrand received the Fridtjof Nansen Medal for “his pioneering work in the understanding of the dynamics of the circulation of the oceans.” Willebrand is director of the Institute for Marine Research and a professor of oceanography at the University of Kiel in Germany.

The Lewis Fry Richardson Medal was awarded to **Julian C. R. Hunt** in recognition of “his fundamental contributions to the understanding of turbulent and stratified flows and dispersion modeling and their applications in environmental fluid dynamics.” He is a professor of climate modeling at University College London.

Alder, Kawasaki Named This Year’s Boltzmann Medalists

The International Union of Pure and Applied Physics has

announced that **Berni Alder** and **Kyozi Kawasaki** will each be awarded the Boltzmann Medal, which honors outstanding achievement in statistical physics. The winners will receive their medals in July at IUPAP’s International Conference on Statistical Physics in Cancun, Mexico.

Alder was acknowledged for “inventing the technique of molecular dynamics simulation and showing that with such ‘computer experiments’ important discoveries in the field of statistical mechanics can be made, in particular the melting/crystallization transition of hard spheres and the long-time decay of autocorrelation functions in fluids,” according to the citation. Alder is a professor emeritus of applied science at the University of California, Davis, and a consultant with the Institute for Scientific Computing Research at Lawrence Livermore National Laboratory.

Kawasaki was recognized for his “contribution to our understanding of dynamic phenomena in condensed matter systems, in particular the mode-coupling theory of fluids near criticality, and nonlinear problems, such as critical phenomena in sheared fluids and phase separation kinetics.” Having retired in March from Chubu University in Japan as a professor of natural sciences and mathematics, Kawasaki currently is spending a year with Los Alamos National Laboratory as a Ulam Scholar.

IN BRIEF

David De Young will begin a three-year term in August as president of the Aspen Center for Physics in Colorado. De Young, a senior scientific staff member at the National Optical Astronomy Observatory in Tucson, Arizona, will succeed **Eric D’Hoker**, who has been the center’s president since 1998. Following his term as president, D’Hoker plans to remain actively involved in affairs of the center. He also will be associated with UCLA’s new Institute for Pure and Applied Mathematics and will return to full-time research on string theory.

Ying Wu, a staff scientist at Lawrence Berkeley National Laboratory, will be joining Duke University next month as an assistant professor of physics.

Congressmen **Rodney P. Frelinghuysen** (R-NJ) and **Rush Holt** (D-NJ) each received the Science Coalition’s Champion of Science Award in an April ceremony at Rutgers University in New Brunswick, New Jersey, in recognition of their support for federal funding of university-based science research. The Washington, DC-based Science Coalition, which represents more than 400 member organizations, works to expand and strengthen the federal government’s investment in university-based scientific, medical, engineering, and agricultural research.

In March, **B. Grant Logan** was named director of the Heavy-Ion Fusion Virtual National Laboratory (VNL), a collaborative venture of Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, and the Princeton Plasma Physics Laboratory. Logan, who previously was deputy director of VNL, succeeds **Roger O. Bangerter**, who retired and will continue to work on heavy-ion inertial fusion.

Jill Dahlburg joined General Atomics in San Diego, California, in February as director of the division of inertial fusion technology and as co-director, with **Vincent Chan**, of the center for fusion theory. She previously was head of the distributed sensor technology office in the Naval Research Laboratory’s tactical electronic warfare division.

The National Center for Atmospheric Research in Boulder, Colorado, has hired **Annick Pouquet** as the first full-time director of the center’s geophysical turbulence program. She previously was director of research at the Observatory of the Côte d’Azur in Nice, France, and director of the observatory’s Cassini Laboratory.

Sharon Glotzer, who was co-founder and director of the Center for Theoretical and Computational Materials Science at NIST in Gaithersburg, Maryland, joined the University of Michigan, Ann Arbor, in January to establish a laboratory for soft-materials simulation and to create, with other computational materials faculty, a new multidisciplinary center for materials simulation.

In February, the Eastern New York Intellectual Property Law Association in Albany honored **James J. Wynne**, **Rangaswamy Srinivasan**,

and **Samuel E. Blum** as Inventors of the Year for 2001 for their “promotion of progress in the science and useful arts in the field of Far Ultraviolet Surgical and Dental Procedures,” according to the citation. The trio discovered “that excimer laser light could etch biological tissue with no apparent damage to the tissue underlying the etched volume. Their discovery laid the foundation for techniques for changing the curvature of the human cornea.” Wynne is program manager for local education outreach at IBM’s T. J. Watson Research Center in Yorktown Heights, New York. Srinivasan and Blum both retired from IBM in 1990. The award was accompanied by a legislative resolution from the New York State Senate that proclaimed 12–16 February 2001 as National Inventor’s Week.

The Joint Institute for Nuclear Research in Dubna, Russia, awarded its Pontecorvo Prize to **George Zatsepin** and **Vladimir Gavrin** in January for their “outstanding contributions to solar neutrino research using the gallium–ger-

manium method at the Baksan Neutrino Observatory [affiliated with the Institute for Nuclear Research of the Russian Academy of Sciences (INR RAS) in Moscow],” according to the citation. Gavrin is head of the Gallium–Germanium Neutrino Telescope Laboratory at the observatory and head of the Laboratory for Radiochemical Methods of Detection of Neutrinos with the INR RAS. Zatsepin heads the INR RAS’s department of high-energy leptons and neutrino astrophysics.

Earlier this year, the University of Cambridge awarded **Sandu Popescu** with the 2001 Adams Prize, acknowledging that his “research in quantum physics has revolutionized the field and has already resulted in the first experimental demonstration of quantum teleportation, involving a single particle of light.” Popescu is a professor of physics at Bristol University in the UK and a member of Hewlett-Packard’s Basic Research Institute in the Mathematical Sciences in Bristol.

the Lawrence Berkeley National Laboratory. Short-lived radioactive nuclei were flown onto the campus by helicopter for rapid measurement. On one of his laboratory doors was the sign “Every nucleus has its moment”; on another was the following:

Lament of an Ancient Beamist

There are moments to remember.

There are moments to forget.

There are moments to publish.

There are moments to regret.

Nierenberg was responsible for determination of many more nuclear spins and moments than any other individual. He was also an outstanding teacher in theoretical and experimental physics.

Nierenberg became familiar with naval warfare problems as project director of Columbia University’s Hudson Laboratories from 1953 to 1954. There, he developed a method for sweeping for pressure mines. He also served in Paris as NATO’s assistant secretary general for scientific affairs from 1960 to 1962. Both positions brought him into contact with antisubmarine warfare (ASW). In 1965, his career took a sharp turn when he accepted the directorship of the Scripps Institution of Oceanography in La Jolla, a position in which he served for 21 years. His association with oceanography did not come out of the blue, however, considering his earlier experiences with Hudson Laboratories and NATO.

Once at Scripps, Nierenberg threw himself into ocean activities with characteristic passion and imagination. Scripps became the prime contractor for the NSF deep-sea drilling program, which is one of the major scientific advances of the 20th century. It was then common belief that hydrocarbons did not exist in the deep ocean basins. In fact, they were encountered at the very first drilling site in the Gulf of Mexico.

Before Nierenberg’s tenure, the emphasis at Scripps had been on seagoing exploration, but shipboard laboratory equipment had been somewhat neglected. Nierenberg immediately took steps to remedy that situation by establishing a computing facility in partnership with the Supercomputer Center in San Diego, California, and calling for the installation of shipboard computers. He also took a personal interest in the development of satellite capabilities, establishing in 1979 a remote-sensing satellite facility, the first in the US, on

OBITUARIES

William Aaron Nierenberg

William Aaron Nierenberg, an outstanding physicist, oceanographer, government adviser, and administrator, died of cancer on 10 September 2000 at his home in La Jolla, California.

Born in New York City on 13 February 1919 to Jewish immigrants from Poland, Nierenberg worked his way from poverty to renown with creativity, energy, and enthusiasm. He obtained a BS in physics from the City College of New York in 1939; his undergraduate education included a year of study at the Sorbonne in Paris (1937–38). He obtained an MA in 1942 and a PhD in 1947, both in physics, from Columbia University. His graduate research was interrupted by work on the Manhattan Project during World War II.

After a physics instructorship at Columbia University (1946–48) and a stay at the University of Michigan as an assistant professor of physics (1948–50), Nierenberg was an associate professor of physics and then a professor of physics at the University



WILLIAM AARON NIERENBERG

of California, Berkeley (UCB), from 1950 to 1965.

On arrival at UCB, Nierenberg formed a group to measure spins and magnetic moments of radioactive nuclei, important parameters for understanding nuclear structure. Near the end of his career at UCB, Nierenberg had five atomic beam systems in operation on campus and at