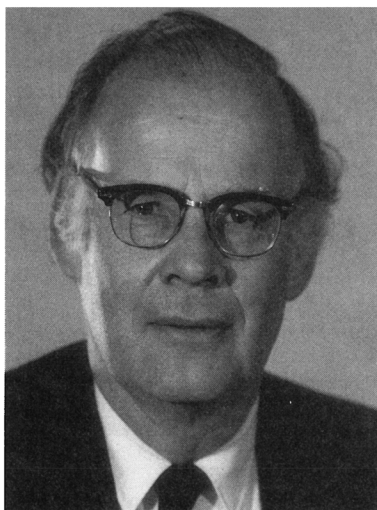


AAPT PHILLIPS AWARD GOES TO BARTLETT; McDERMOTT TO GIVE MILLIKAN LECTURE

At the June meeting of the American Association of Physics Teachers held in Minneapolis, Minnesota, Albert A. Bartlett of the University of Colorado, Boulder, received the Melba Phillips Award, which is presented occasionally to recognize exceptional service to physics education. According to the presentation made at the awards ceremony, "Albert Bartlett is clearly one of those very few people among us who belong to the AAPT 'Hall of Fame.'"

Bartlett is well-known in physics education circles for his lecture on the consequences of failing to understand the exponential function, which has resulted in unchecked population growth and rising rates of consumption of fossil fuels. He has given his lecture over 900 times since 1969 both in the US and abroad. Bartlett earned a PhD in physics from Harvard University in 1951. He joined the physics department faculty at the University of Colorado, Boulder, in 1950 and has been a professor of physics there since 1962.

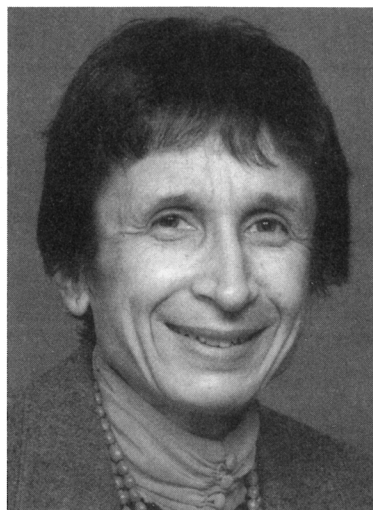
This year's Robert A. Millikan Lecture was given at the June meeting by Lillian C. McDermott of the University of Washington. Her lecture was entitled "What We Teach and What Is Learned—Closing the Gap." The Mil-



Albert A. Bartlett

likan Lecture Award goes each year to an individual who has made "notable and creative contributions to the teaching of physics."

McDermott has long been active in physics education research. Her current research involves identifying specific difficulties that students have in learning physics and developing instructional materials that address those difficulties. McDermott re-



Lillian C. McDermott

ceived a PhD in physics from Columbia University in 1959. After holding positions at City College in New York and at Seattle University, she moved in 1967 to the University of Washington, where she is now a professor of physics. She is director of the Physics Education Group, a program in which graduate students can earn physics doctorates for research in physics education.

PETER ALMOND RECEIVES COOLIDGE AWARD, HIGHEST HONOR OF AAPM

At its annual meeting in St Louis, Missouri, in July, the American Association of Physicists in Medicine bestowed its highest honor, the William D. Coolidge Award, on Peter R. Almond of the University of Louisville. The award recognizes "lifetime achievement in and distinguished contributions to the field of medical physics."

Almond received his PhD in nuclear physics from Rice University in 1964. From 1965 to 1985 he was on the faculty of M. D. Anderson Hospi-

tal in Houston as a physicist and professor of biophysics and later as head of the radiation physics section and director of the cyclotron unit. In 1985 he moved to the University of Louisville, where he is currently vice chairman of research and professor of radiation oncology at the James Graham Brown Cancer Center.

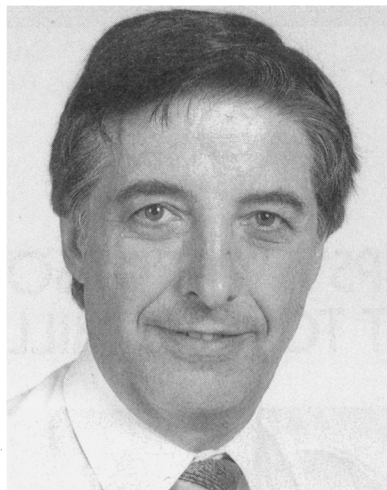
While at Anderson Hospital, Almond helped develop cancer treatments that use various forms of radiation, including high-energy photons, electrons and neutrons, and he de-

vised techniques and equipment for measuring these radiations. Currently, Almond and his colleagues at Louisville are using diagnostic tools such as CT scanners and magnetic resonance imagers to evaluate radiation doses, so that higher radiation doses can be administered to tumors while sparing surrounding normal tissue.

This year's Sylvia Sorkin Greenfield Award, presented for the best paper published in AAPM's journal, *Medical Physics*, went to E. Mark Haacke, Zhi-Pei Liang and Steven H. Izen for their paper "Constrained Reconstruction: A Super-Resolution, Optimal Signal-to-Noise Alternative

to the Fourier Transform in Magnetic Resonance Imaging." Haacke is an associate professor of physics and radiology and Izen is an assistant professor of mathematics at Case Western Reserve University. Liang is a researcher at the University of Illinois's National Center for Supercomputer Applications and Biomedical Resonances Laboratory.

Anders Ahnesjö of the Karolinska Institute and the University of Stockholm in Sweden received the 1990 Farrington Daniels Award for his paper "Collapsed Cone Convolution of Radiant Energy for Photon Dose Calculation in Heterogeneous Media." The Farrington Daniels Award is presented each year to the best paper on radiation dosimetry to appear in *Medical Physics*.



Peter R. Almond

eral public.

Geller received a PhD in physics from Princeton in 1975. Since then she has been at the Harvard-Smithsonian Center for Astrophysics.

Koehl uses laboratory and field experiments to study the morphology and mechanics of living organisms. In one project, she tested theories of the evolution of wings in insects by measuring the performance of models of Paleozoic insects suspended in a wind tunnel. Koehl is currently working to understand how early embryos change shape, and in a different set of experiments she is studying the fluid mechanics of how very small planktonic animals move through the water and catch food particles.

Koehl received a PhD in zoology from Duke University in 1976. In 1978-79 she was an assistant professor at Brown University, and since then she has been on the faculty at Berkeley. —MDS

MACARTHUR FELLOWSHIPS GO TO MARGARET GELLER AND MIMI KOEHL

This July the MacArthur Foundation added 36 names to its list of fellows. The MacArthur Fellowships, sometimes called the "genius awards," are given for a broad spectrum of creative work ranging from physics to dance. Begun in 1981, the fellowship program has so far honored 319 people with stipends ranging from \$150 000 to \$375 000.

Among this year's winners were Margaret Joan Geller, an astronomy professor at Harvard University and a senior scientist at the Smithsonian Institution, and Mimi Koehl, a professor of integrative biology at the University of California, Berkeley.

Since 1980 Geller has been collaborating with John Huchra on a large-scale redshift survey of galaxies. Their work has revealed pro-

nounced bubble-like structures on the scales of the survey itself, which covers a conical region roughly 450 million lightyears deep. They found a so-called Great Wall of galaxies that so confounds the standard tenets of cosmology that Geller suspects there is "something fundamental missing from our understanding of the way things work" (see *PHYSICS TODAY*, June, page 20).

Geller's main role in the collaboration with Huchra is to characterize statistically their map of the galaxy distribution so that it can be used to test other researchers' *n*-body computer models of the origin and evolution of large-scale structure. Geller plans to use some of the fellowship money to help support her efforts to make science accessible to the gen-

IN BRIEF

Ira Dyer of the MIT department of ocean engineering has been named the first holder of the Weber-Shaughness Professorship. Dyer studies ocean acoustics and vibration.

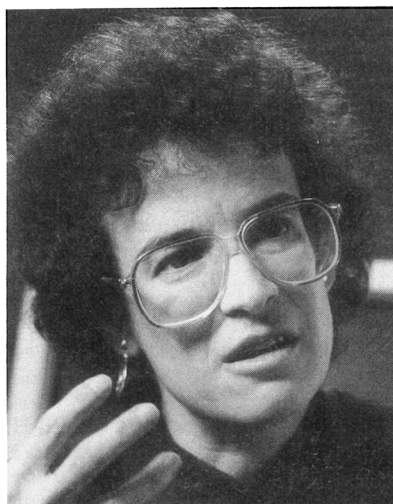
OBITUARIES

Stewart E. Miller

Stewart E. Miller, a pioneer and leader in optical-fiber communications, died in Middletown, New Jersey, on 27 February 1990, at the age of 71.

After obtaining SB and SM degrees in electrical engineering from MIT in 1941, Miller joined AT&T Bell Laboratories and began a lifetime career pursuing research and managing technical innovation in telecommunications. His work encompassed microwave radar, coaxial-cable systems, millimeter-wave transmission and lightwave communications. In 1983 he retired from his position as the director of the Lightwave Telecommunications Research Laboratory at the Crawford Hill location of Bell Labs, but he continued his research activities as a consultant to Bellcore until his death. He received the John Tyndall Award for lightwave communications from the Optical Society of America in 1989 (see *PHYSICS TODAY*, April, page 98). He coedited the two most authoritative and comprehensive books in the field, volumes I and II of *Optical Fiber Telecommunications*, which were published in 1979 and 1988.

Margaret Geller



Mimi Koehl

