

is currently studying the problem of quark confinement.

Gribov received an undergraduate degree from Leningrad University in 1952 and a DSc in physics and mathematics from the Leningrad Physico-Technical Institute of the USSR Academy of Sciences, where he also worked from 1959 to 1970. He then became head of the theory division of the Leningrad Institute for Nuclear Physics. In 1980 he joined the Landau Institute in Moscow, where he is currently a senior physicist.

The APS division of atomic, molecular and optical physics presented the Herbert P. Broida Prize to David E. Pritchard of MIT. Pritchard was cited for his "monumental studies of energy transfer in molecular collisions; seminal research on atom wave interferometry and atom optics; numerous studies of the forces of light on atoms and their applications to atom cooling and trapping; and the development of single-ion mass spectroscopy." (Some of Pritchard's recent work is described in the news story on page 17.)

Pritchard earned a BS from Caltech in 1962 and a PhD in physics from Harvard University in 1968. He then joined the faculty of MIT, where he is currently a professor of physics.

Chris H. Greene of the University of Colorado, Boulder, received the I. I. Rabi Prize, also given by the atomic, molecular and optical physics division. The division cited Greene for "his many contributions to atomic and molecular theory, including studies of resonance vibronic processes, multiple electron excitations, photoabsorption in external fields and threshold effects of long-range forces." Greene has also worked on electron correlations in atoms and small molecules.

Greene earned a BS from the University of Nebraska in 1976 and an MS and a PhD in physics from the University of Chicago in 1977 and 1980, respectively. From 1981 to 1988 he was on the faculty of Louisiana State University. Since 1989 he has been a professor of physics at the University of Colorado.

The Award for Research in an Undergraduate Institution went this year to Larry R. Hunter of Amherst College. APS cited Hunter for "his outstanding research in atomic physics, particularly his search for the electric dipole moment of the electron, and for his enthusiastic inclusion of undergraduate students at Amherst College in his research program."

Hunter earned a PhD in physics from the University of California, Berkeley, in 1981. He joined the Amherst faculty in 1983 and is now

an associate professor of physics.

For his "lifelong effort to stimulate public awareness of the beauty of science and the dangers of its abuses," Victor Weisskopf of MIT received the Forum Award from the APS Forum on Physics and Society. Weisskopf, a particle physicist, has for many years advocated nuclear arms control, and more recently he has been involved in environmental issues.

Weisskopf earned a PhD in physics from the University of Göttingen in 1931. He served on the University of Rochester faculty from 1937 to 1943, and he was a group leader on the Manhattan Project from 1943 to 1946. He then joined MIT, where he is now a professor of physics emeritus. From 1961 to 1965 he served as director-general of CERN.

For "leading and greatly strengthening the Congressional Office of Technology Assessment," John H. Gibbons, the director of OTA, was given the Leo Szilard Award of the Forum on Physics and Society. The award citation said that under Gibbons's leadership, the OTA has become "an institution that has produced balanced, thoughtful and influential assessments of public policy issues dealing with science and technology." (An article on energy policy by Gibbons begins on page 22.)

Gibbons received a PhD in physics from Duke University in 1954. From 1954 to 1975 he was a physicist at Oak Ridge National Laboratory, and from 1975 to 1979 he was a professor of physics at the University of Tennessee. He became head of OTA in 1979.

In addition to the prizes described above, APS presented the 1991 Julius Edgar Lilienfeld Prize to Daniel Kleppner of MIT at the April meeting (see PHYSICS TODAY, April, page 123).

IN BRIEF

Thomas Hemmick, Chris Jacobsen, Chang Kee Jung, Mohammad M. Mohammadi and Luis Orozco recently became assistant professors of physics at the State University of New York at Stony Brook. Hemmick, an experimenter working with relativistic heavy ions, was most recently an associate research physicist at Yale University. Jacobsen, who does synchrotron x-ray physics, was formerly a postdoc at SUNY Stony Brook and at the Lawrence Berkeley Laboratory. Jung, a high-energy-physics experimenter, came to Stony Brook from the Stanford Linear Accelerator Center, where he was a postgraduate research physicist. Mohammadi, also an experimenter

working in high-energy physics, was most recently an assistant research physicist at the University of California, Los Angeles. Orozco was a research associate at Harvard University working in atomic physics.

J. Murray Gibson, until recently head of the electronic and photonic materials research department at AT&T Bell Laboratories, is now on the faculty of the University of Illinois at Urbana-Champaign. Gibson, whose research is in transmission electron microscopy and surface science, is a professor in the departments of materials science and physics.

OBITUARIES

Howel G. Pugh

Howel G. Pugh died suddenly on 7 November 1989 of complications arising from leukemia. His death marked the end of a distinguished career in nuclear physics, the depth and breadth of which can be seen from the nearly eighty publications that bear his name. Despite his illness, he remained active in the field until almost the hour of his death.

Howel was born in 1933 in Wales, and received both his undergraduate and graduate degrees from the University of Cambridge. Among his early experiments, begun at Harwell and continued at Lawrence Berkeley Laboratory and the University of Maryland, were his pioneering studies of reactions involving the direct knockout of particles (primarily protons and alphas) from the nucleus. This work included a set of collateral experiments on scattering from few-nucleon systems, designed to facilitate an understanding of the reaction mechanism that would make possible the extraction of spectroscopic information. During this period Howel also examined the effects of exchange and spin-orbit potentials in α - α and α - ^3He scattering and searched for double-spectator processes in d-d scattering.

While at Maryland, where he rose to the rank of full professor, Howel took a sabbatical year in 1973 to participate in experiments on inclusive reactions done at the Intersecting Storage Rings at CERN. He was among the first to realize the usefulness of high-energy heavy-ion collisions, and he attempted at that time to interest CERN in accelerating alpha particles in the ISR (which would produce collisions at a lab energy equivalent to 500 GeV/nucleon); the same interest later led him to co-author a proposal to DOE for an

WE HEAR THAT



Howel G. Pugh

American-built heavy-ion injector for the CERN Proton Synchrotron.

In 1975 Howel accepted a temporary assignment at the National Science Foundation as program director for intermediate-energy physics. He wound up staying at NSF as head of the physics division's nuclear science section. In that position, he was instrumental in creating the first joint NSF-DOE Nuclear Science Advisory Committee. When he left NSF in 1979 to return to LBL, it was because he had become persuaded that the construction of a relativistic heavy-ion collider, a project he deemed of paramount importance, was unlikely to occur without strong advocacy "from below." At LBL he helped lead the effort to convince the nuclear physics community of the need for such a machine. It was a bittersweet victory for him to witness the success of that effort, only to see the machine awarded to another laboratory.

As scientific director of the Bevalac at LBL, Howel encouraged the exploitation of the streamer chamber and the Plastic Ball detectors that cover a solid angle of 4π . Experiments using these devices resulted in the first generally recognized observations of the compression and flow of nuclear matter. By the mid-1980s it was clear that a new 4π device was needed at the Bevalac to continue studies related to the nuclear equation of state. Howel led the design effort for such a device—the EOS time projection chamber currently under construction and scheduled to be operating in 1992.

In recent years Howel's scientific focus had increasingly shifted to the high-energy heavy-ion program at the CERN Super Proton Synchrotron, where he actively participated in the

NA35 streamer-chamber effort and where he had been awarded a CERN Associateship for 1991. His final efforts were toward incorporating a time projection chamber into the NA35 experiment.

Howel was generally recognized as a spokesman for high-energy nuclear physics. The clear style of his written and spoken prose reflected the lucidity of his thinking. But in equal measure it reflected his love of and care for the English language. He was surely among the few physicists whose reference shelf included H. W. Fowler's *Dictionary of Modern English Usage*.

Although Howel was an extremely private person, others found themselves induced to confide in him, for his judgment in most nonscientific matters was as sound as it was in physics. He was a thoroughly decent and scrupulously honest person. He will be sorely missed, not only by those of us who regarded him as a friend and colleague, but by the physics community as a whole.

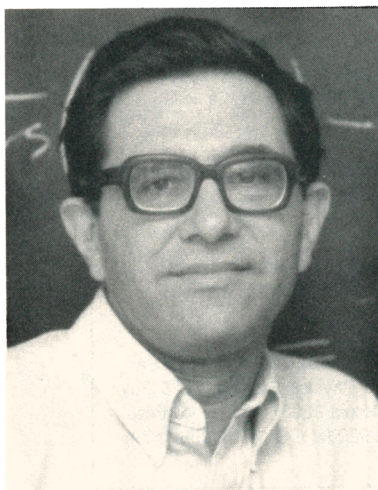
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Yossef Dothan

Yossef (Joe) Dothan, a professor of physics at Tel Aviv University, passed away very suddenly from cardiac arrest on 20 May 1990, at the age of 50.

Yossef was born in Petach Tikva, Israel. In 1961 he received his BSc and MSc from the Hebrew University in Jerusalem. His PhD dissertation, on v -e scattering, was written under the supervision of Amos de-Shalit and completed more than a decade before

Yossef Dothan



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