

Hoyle, who now lives in Bourne-mouth, England, is the former Plumian Professor of astronomy and experimental philosophy at Cambridge University and the founder and former director of what is now the Institute of Astronomy in Cambridge. Salpeter is the James Gilbert White Distinguished Professor in the Physical Sciences at Cornell University. The two are to share the prize for "their pioneering contributions to the study of nuclear processes in stars and stellar evolution." According to the academy's announcement, Hoyle should be "remembered as a pioneer and leading representative during the 1940s and 1950s for the study of the formation of chemical elements in stars." The academy goes on to note that "later very important work by Hoyle dealt with the dating of the Solar System and the Galaxy by nuclear methods, the structure of so-called super-massive stars and production of light elements in those and in the Big Bang."

Salpeter is cited by the academy for contributing "very essentially to the understanding of nuclear reactions in interiors of stars during the 1950s," especially for identifying the reaction chain, now called the Salpeter process, that "burns" helium to carbon. Among the other contributions mentioned in the academy's announcement are Salpeter's study during the 1960s of how matter is accreted around black holes and his investigations in the 1980s of stellar evolution in the early universe.

APS Prizes Given at Summer Meetings

Several awards of the American Physical Society are being presented during meetings this summer. At the Topical Conference on Shock Compression of Condensed Matter, held in Amherst, Massachusetts, at the end of July, the Shock Compression Science Award was presented to **Arthur C. Mitchell** and **William J. Nellis** "in recognition of their pioneering experimental investigations of molecular and planetary fluids using shock compression." Mitchell and Nellis are both physicists at Lawrence Livermore National Laboratory.

This month's International Conference on Computational Physics, in Santa Cruz, California, will be the setting for the presentation of the Aneesur Rahman Prize for Computational Physics, given to **Donald H. Weingarten** of IBM Corp's Thomas J. Watson Research Center in Yorktown Heights, New York. Weingarten is

cited for "his seminal work on lattice quantum chromodynamics including algorithmic innovations, massively parallel computer software development and hardware implementation that led to calculations of hadron masses and the mass and decay couplings of the scalar glueball."

IN BRIEF

Two prizes were awarded at the February 1997 meeting in Beijing of an international conference entitled "Materials and Mechanisms of Superconductivity-High Temperature Superconductivity" and sponsored by the International Union of Pure and Applied Physics. The John Bardeen Prize went to **Philip Anderson**, Joseph Henry Professor of Physics at Princeton University, for his "contributions to the understanding of broken symmetry, the order parameter in the A and B phases of superfluid helium three and the role of impurities in metallic superconductors." The Bernd Matthias Prize was shared by **Robert Cava**, of both the chemistry department and the Materials Institute at Princeton University, and **Bertram Batlogg**, head of the material physics research department at Bell Laboratories, Lucent Technologies. The two were recognized for "creative use of solid state

chemistry and physics in the discovery of new superconducting materials."

Peter Galison, Mallinckrodt Professor of the History of Science and of Physics at Harvard University, has received a 1997 MacArthur Fellowship worth \$265 000. According to the MacArthur Foundation's announcement, Galison "focuses on the role of scientific instruments, which not only represent the epistemological center of experimental physicists' work, but also serve as a focal point of social organization for scientists."

John Hopfield became a professor of molecular biology at Princeton University in April. Through the end of 1996 he had been a professor of chemistry and of biology at Caltech.

The Institute of Electrical and Electronics Engineers presented its Edison Medal to **Esther M. Conwell**. According to IEEE, Conwell is the first woman to receive one of the institute's medals. Conwell, a research fellow at Xerox Corp in Webster, New York, was cited for "her fundamental contributions to transport theory in semiconductors and organic conductors, and for their application to the semiconductor, electronic copying and printing industries."

OBITUARIES

Abdus Salam

Abdus Salam died at age 70 on 21 November 1996, at his home in Oxford, England. He was best known for his pioneering work on electroweak unification, for which he shared the Nobel Prize in Physics in 1979 with Sheldon Glashow and Steven Weinberg. Salam will be remembered also for his invaluable contributions to the propagation of science in the third world. He founded the International Center for Theoretical Physics (ICTP) in Trieste, Italy, and directed it for over 30 years; he also helped create other international research centers, several international foundations, such as the Third World Academy of Science, and a number of international prizes.

Salam was born in Jhang, a district in the part of British India that is now Pakistan. Known at an early age for his sharp intellect, he completed his undergraduate education at the University of the Punjab in 1946, and won a scholarship to continue his graduate studies at the University of Cambridge's St. John's College. He excelled there, securing a first (top honors) in both physics and mathematics. While



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seeking a research problem for his thesis, he asked the advice of Paul Matthews, who was about to finish his PhD. Matthews had been attempting to extend to meson theories, which describe the nuclear forces, the renormalization techniques that had recently been applied so successfully to avoid the infinities in quantum electrodynamics. Matthews challenged