

Gürsey receives Wigner Medal for symmetry work

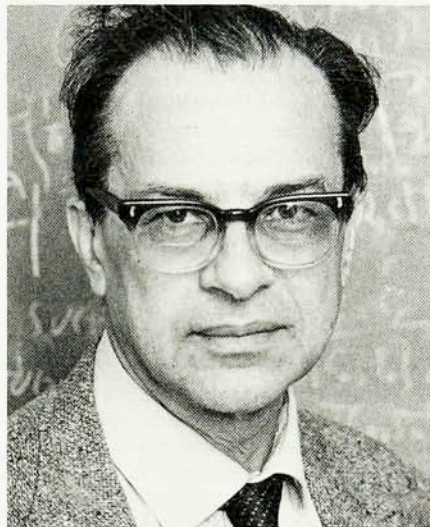
The Group Theory Foundation presented its Wigner Medal to Feza Gürsey (Yale University) "in recognition of his essential role in the discovery of symmetries in particle physics" at the 15th International Colloquium on Group Theoretical Methods in Physics, held in Philadelphia last October.

Gürsey's research concerns the symmetries underlying the fundamental laws of physics. He introduced chiral symmetry in 1960 and did pioneering work on the extension of space-time symmetry from the Poincaré group to the conformal group. Gürsey was cited as "one of the driving forces" in the extension of the internal symmetry groups from SU(3) to other Lie groups, and he encouraged the idea that the space-time and internal symmetries should be unified. In 1964 he and Luigi Radicati suggested that the nucleon and low-lying baryon resonance states could be represented by the group SU(6), combining the ordinary spin groups and the flavor SU(3) group. In its citation the foundation noted that this paper "started an enormous development aimed at an understanding of space-time and charge degrees of freedom in some unified manner." In the early 1980s Gürsey suggested that the exceptional Lie groups E(6), E(7) and E(8) would be useful in physics. He is now studying group theoretical methods in scattering, various aspects of supersymmetry and the role of division algebras in unified theories of interactions.

Gürsey received his BSc in physics and mathematics from Istanbul University in 1944 and his PhD from Imperial College, University of London, in 1950. He remained in England as a postdoc at Cambridge University in 1950-51, and then returned to Turkey as a teaching assistant at Istanbul University. He completed his *Habilitation* in 1953, and was *Docent* from 1954 to 1961. At that time he became a professor of physics at the Middle East Technical University in Ankara. Gürsey held visiting positions at Brookhaven National Laboratory (1957-58), the

Institute for Advanced Study (1958-60) and Columbia University (1960-61). He came to the United States permanently in 1968 as a professor of physics at Yale University; he was named Josiah Willard Gibbs Professor of Physics there in 1977.

The Wigner Medal is awarded biennially for "outstanding contributions to the understanding of physics through group theory." The foundation considers work such as the creation and development of mathematical tools that have become important in the description of physical phenomena, the application of group theoretical methods in chemistry and other sciences, the calculation of experimental numbers and the formulation of general laws of nature using group and representation theoretical methods.



GÜRSEY

in brief

John S. Laughlin, professor of radiology at the Cornell University Medical College, received the Gold Medal of the American Radium Society "in recognition of his contributions in nuclear physics to the treatment of cancer" earlier this year at the society's 68th annual meeting. Laughlin also presented the society's annual Janeway Lecture at the meeting, speaking on physical aspects of radiation treatment.

Roger L. Hagengruber has been named to the newly created position of vice president of exploratory systems at Sandia National Laboratories (Albuquerque, New Mexico). He has been with the company since 1972, and prior to this appointment had served as director of systems studies since January 1984.

Herbert Friedman, former chairman of the National Research Council's Commission on Physical Sciences, Mathematics and Resources (1980-86), who pioneered the fields of rocket astronomy and high-energy astrophysics during his 40 years at the Naval Research

Laboratory, has been named to the one-year Martin Marietta Chair of Space History at the Smithsonian Institution's Air and Space Museum.

Allen M. Hermann, formerly a member of the technical staff at the Jet Propulsion Laboratory, has become the new chairman of the physics department at the University of Arkansas.

Theodor W. Hänsch, professor of physics at Stanford University, has become director at the Max Planck Institute for Quantum Optics in Munich and professor at the University of Munich.

Roland W. Schmitt, who has served as director of General Electric's research and development center in Schenectady, New York, since 1978, has been named senior vice president and chief scientist for the company.

Orval E. Jones, formerly vice president for defense programs at Sandia National Laboratories, has been named executive vice president of the company. He