

German Physical Society gives theoretical-physics awards

The German Physical Society has announced the winners of three of its annual awards: Ernst C. G. Stueckelberg was awarded the Max Planck Medal, Franz Wegner received the Walter Schottky Prize and Hermann Haken was honored with the Max Born Medal and Prize, which is given jointly with the (British) Institute of Physics.

Stueckelberg, emeritus professor of theoretical physics at the University of Geneva, studied under Arnold Sommerfeld and earned his doctorate in 1927 in Basel. He spent 1930-32 as an assistant professor at Princeton University. Since 1935 he has served on the faculty of the University of Geneva.

The Max Planck Medal was given to Stueckelberg for work in quantum field theory, molecular physics and thermodynamics. His interest in quantum field theory dates from 1934; among his contributions in this area was the consideration of positrons as negative-energy electrons running backwards in time. He developed also a theory of nuclear forces based on the exchange of vector bosons (or "Stueckelberg divergences") and the idea of the renormalization group, which has had numerous applications in the



STUECKELBERG



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WEGNER

theory of phase transitions. His recent work has included a study of thermodynamics in special and general relativity.

Wegner is professor at the University of Heidelberg Institute for Theoretical Physics. He received the Walter Schottky Prize for his theoretical work in the areas of phase transitions and elementary particles. In 1972 he earned his "habilitation" at the University of Cologne and then was affiliated in turn with the Munich Technische Hochschule, the Max Planck Institute for Physics and Brown University. He assumed his current position in Heidelberg in 1974.

The Max Born Medal and Prize was presented to Haken for his contributions to quantum optics and solid-state physics. He was the first to establish a quantum-mechanical theory of laser discharges and, in the area of solid-state theory, he calculated the binding energy of the exciton (also known as the "Haken potential"). Since 1960 he has been professor of theoretical physics at the University of Stuttgart. During his career he has held positions at the University of Liverpool, Cornell University and Bell Laboratories, Murray Hill, N.J., as well as at institutions in Japan and the USSR.

Iijima and Cowley share crystallography prize

Sumio Iijima and John M. Cowley, both of Arizona State University, have been named recipients of the Bertram E. Warren Award in diffraction physics. The Warren Award is presented by the American Crystallographic Association under the sponsorship of IBM. Iijima and Cowley received the award for the development of techniques for the direct imaging of crystal-structure atom configurations through the use of high-resolution electron microscopy.

A Japanese citizen, Iijima received his doctorate in 1968 from Tohoku University. He spent two years with the physics department there before accepting his current position as research associate at Arizona State University in 1970.

Cowley has been Galvin Professor of Physics since 1970. Prior to this appointment he worked primarily in Australia, first with the Commonwealth Sci-

entific and Industrial Research Organization (1945-62) and then as professor of physics at the University of Melbourne (1962-70). He holds doctorates from the Massachusetts Institute of Technology and the University of Adelaide.

Payne-Gaposchkin honored by Astronomical Society

The American Astronomical Society has chosen Cecelia H. Payne-Gaposchkin as the Henry Norris Russell Lecturer for 1976. Emeritus professor of astronomy at Harvard University and staff member of the Smithsonian Astrophysical Observatory, Payne-Gaposchkin was recognized for her contributions to the areas of stellar atmospheres, spectral classification, variable stars and galaxies.

In 1925 Payne-Gaposchkin was awarded a PhD by Radcliffe College for her book *Stellar Atmospheres*. She joined the staff of the Harvard Observa-

tory in 1923 and, in 1956, was appointed Phillips Professor of Astronomy at Harvard. For ten years she held this position jointly with the chairmanship of the department of astronomy at Harvard.

Helfrich wins Hewlett-Packard Europhysics award

The annual Hewlett-Packard Europhysics Prize of the European Physical Society has been presented to Wolfgang Helfrich, associate professor of physics at the Freie Universität (Berlin). The prize is given in recognition of Helfrich's contributions to the physics of liquid crystals and consists of 20 000 Swiss francs.

Helfrich received his doctorate from the Munich Technische Hochschule. He worked as an experimental physicist in Munich and with the National Research Council in Ottawa, 1960-66; during this period he studied the electrical and optical properties of organic crystals. He