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particle accelerators. Ernest Lawrence received the Fermi Award in 1957.

## Steacie Prize for 1983 to William G. Unruh

The E.W.R. Steacie Memorial Fund and the National Research Council of Canada have announced that William G. Unruh, of the University of British Columbia, has received the Steacie Prize for 1983. The prize recognizes distinguished research in natural sciences by someone under 40 years of age.

Unruh was educated at the University of Manitoba and Princeton, from which he received his PhD in 1971. He subsequently held fellowships at Birkbeck College, University of London, and at the University of California, Berkeley, before joining the faculty at McMaster University in Hamilton, Ontario, in 1974. He has been at the University of British Columbia since 1976.

In his research, Unruh has focused on problems involving black holes and quantum gravity. He was the first to demonstrate rigorously that a Kerr black hole emits particles spontaneously. He also showed that an accelerated detector behaves as if it were bathed in blackbody radiation at a temperature that depends on the acceleration. Unruh's current work involves questions relating to the effects of gravitational fields on quantum processes, such as particle creation and particle detection.

## Revelle receives Vannevar Bush Award

Roger R. Revelle, a major contributor to several fields of science and public policy, is honored this year with the National Science Board's Vannevar Bush Award. Revelle is Richard Saltonstall Professor of Population Policy, Emeritus, at Harvard, emeritus director of the Scripps Institution of Oceanography, which he ran from 1950 to 1964, and emeritus dean of research at the University of California, San Diego, which he helped found. While he was director at Scripps, Revelle led a number of Pacific Ocean expeditions to study deep oceanic processes and the geology of the sea floor. He was a founder of the Intergovernmental Oceanographic Commission and the Scientific Committee on Ocean Research of the International Council of Scientific Unions.

In the early 1960s, as science adviser to Secretary of the Interior Stewart Udall, Revelle became interested in problems connected with world population growth, poverty and economic development. He has worked on stud-

ies involving land, water and energy resources in India, Bangladesh, Sri Lanka and Pakistan. From 1964 to 1966, he was the American member of the Education Commission of the Government of India, which made recommendations for basic changes in India's educational system.

Revelle was the first chairman of the National Academy's Board on Science and Technology for Development and he served as president of the American Association for the Advancement of Science in 1974.

## MacArthur Fellowships for Nelson, Meselson

David Nelson, professor of physics at Harvard University, has been awarded a five-year, \$172 000 grant by the John D. and Catherine T. MacArthur Foundation in Chicago. Nelson, 32, received his PhD from Cornell University in 1975 and currently specializes in condensed-matter physics and chemistry—the theory of melting, characterization of underlying geometric structures in amorphous matter, and the theory of the glassy state. Nelson says that he is “not entirely sure” how he will make use of the MacArthur money, except that he will take a leave of absence from teaching and committee assignments next spring so as to devote himself fully to research. His key research interest, at this time, is the development of a topological theory for the structure and statistical mechanics of glass. This endeavor grew out of work he did with Bertrand Halperin at Harvard five years ago, Nelson says.

Matthew Meselson, Thomas Dudley Cabot Professor of the Natural Sciences at Harvard, has received a \$250 000 MacArthur grant. A biologist, Meselson has worked on genetic engineering and on issues connected with chemical and biological warfare. During the past year, Meselson has attracted attention with a theory that “yellow rain”—a murky phenomenon that the Reagan administration has attributed to Soviet chemical warfare—is actually a natural toxin carried by bee excrement.

## New award for work on electromagnetic launchers

A new medal named in honor of the late Peter Mark has been established to recognize work on electromagnetic launch technology (see *PHYSICS TODAY*, December 1980, page 19). The first recipients included Richard Marshall (Australian National University) and Henry Kolm (EML Research and MIT). A third medal was given to Mark's widow on his behalf. The medals were

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