

months each year at universities in such countries as the US as long as he agrees to return home for nine months each year. The program is designed to combat the isolation that Salam said is the worst handicap such a scientist faces.

AIP Begins Two-Year Study Of Nuclear-Physics History

A two-year study of how nuclear and particle physics has developed, in both scientific and social terms, is under way at the Center for History and Philosophy of Physics of the American Institute of Physics. In late September the National Science Foundation granted \$66 100 for the study, a joint project of AIP and the American Academy of Arts and Sciences.

The study will trace the conceptual, methodological and institutional development of nuclear physics from its emergence as a major research field in the early 1930's through the subsequent development of subnuclear or particle physics as a major field.

Charles Weiner, director of the AIP Physics History Division, will direct the study. A research associate, Henry Small, who like Weiner has a PhD in science history, and a research assistant, Mrs. Elspeth Hart, are assisting Weiner in the project.

The study will focus on three fundamental questions. The first concerns when, how, and why physicists were attracted to nuclear physics in the early 1930's and to particle physics in the early postwar period. Restated, the question is how a research specialty became a major research field with high priority in the allocation of intellectual and social resources.

The second question deals with institutional aspects of nuclear physics. The investigators will try to trace formal and informal organization, development of communications systems, financial support, and the emergence of institutional centers of nuclear physics.

Effects of specific concepts and techniques on nuclear and particle physics make up the third question. Specifically the study team wants to know how nuclear models evolved and what effect they had on experiments, how concepts of nuclear forces arose and what impact they had, and how accelerators and detectors were developed and what influence they had on

both experiment and theory and on the organization and financing of physics.

For the answers, the investigators will consult published literature, compilations of manpower data, biographical and bibliographical studies of individual physicists, personal correspondence and notebooks and archives and records of institutions. Much of this material already is available in the Niels Bohr Library. Tape-recorded interviews will be conducted with several individuals who played significant roles in the development of nuclear and particle physics.

Institute involvement in the history and philosophy of physics dates from 1960 when the governing board appointed an advisory committee on the subject headed by Gerald Holton of Harvard. A year later a gift from the late Dannie Heineman helped establish the Niels Bohr Library. NSF approved grants in 1961 and 1963 for work in the recent history of US physics directed by W. James King.

In 1964 Weiner became director and continued the program of locating cataloging and encouraging the preservation and use of historical source materials. The following year a permanent physics-history division came into being at AIP. An NSF grant to con-

tinue the work through March 1968 was approved the same month.

A joint AIP-American Academy Committee on the History of Contemporary physics was established in 1966 with I. Bernard Cohen of Harvard and Victor F. Weisskopf of MIT as cochairmen. Other members are Oscar Handlin and Holton of Harvard, Robert K. Merton of Columbia and Philip Morrison and Cyril S. Smith of MIT.

This group wanted to explore the needs and opportunities for documentation of the emergence and growth of new research fields in physics since 1930, fields that have had major impact within the physics community and on all of society.

In May 1967 the committee convened 25 physicists, historians, philosophers and sociologists at Brookline, Mass., to discuss specific aspects of early nuclear physics. Out of this conference grew the proposal for the present study. At least one more such conference will take place.

Output during and after the study is expected to include reports and monographs on specific issues, collections and guides to original source materials, and conference proceedings. Techniques developed during the project will provide the basis for study of other fields of recent development.

IN BRIEF

A severe curtailment in the number of US government scholarships for graduate study abroad in 1969-70 has been announced by the Institute of International Education. Cuts in the Fulbright-Hays program eliminated all grants to the United Kingdom and caused severe reductions in other areas.

A new medal for marine physical science, particularly underwater acoustics, has been established by the Institute of Physics and the Physical Society in London. The prize is named for Albert B. Wood, who devoted nearly 50 years to physical oceanography.

IBM has established a communications and engineering sciences center in Gaithersburg, Md., near the National Bureau of Standards laboratory complex. IBM's former Center for Exploratory Studies has been incorporated into the new facility.

A \$100 000 grant to study social effects of the Weston 200-GeV accelerator has been made to the Center for Urban Studies at the

University of Chicago. The Department of Commerce provided the money for the first year of a long-range study.

About 300 disadvantaged persons will be trained for skilled jobs under a new program at Oak Ridge. The \$472 000, seven-month program is a followup to a two-year experimental program that graduated 525 persons.

Argonne National Laboratory has created a center for educational affairs to promote productive relationships between itself and interested universities and colleges. Shelby A. Miller of the University of Rochester will direct the center.

Three \$4000 scholarships in 1969-70 are being offered by the American Vacuum Society for graduate work in vacuum science and technology, vacuum metallurgy, surface physics, thin films and related areas. Information is available from the AVS at 335 E 45 St, New York, N.Y. 10017; application deadline is 15 Feb. □