

APS ISSUES STATEMENTS ON SSC, SPACE STATION AND SOVIET ANTI-SEMITISM

Against the backdrop of an October 1990 Federal budget agreement that bars the shifting of government funds among domestic, foreign and defense programs, the council of The American Physical Society approved at its January meeting two resolutions concerning funding for the Superconducting Super Collider and the proposed manned space station. In the SSC statement, the council concludes that while the facility should be built in a timely fashion, "the funding required to achieve this goal must not be at the expense of the broadly based scientific research program of the

US." The statement on the space station questions claims that NASA has made about its potential contributions to the physical sciences, which the agency has used as a justification for this enormously expensive project.

The council also passed a third resolution, which condemns anti-Semitism in the Soviet Union. (For the full texts of these statements, see the accompanying box.)

The statements on the SSC and the space station represent "the first time APS has come to grips with the issue of prioritization of Federal support for physics research," says APS Execu-

tive Secretary N. Richard Werthamer. "In much of the past, this wasn't necessary, because Federal support was growing rapidly. The most critical element driving the council to this statement was the budget agreement."

The SSC statement is significant in that it represents "the first time the Physics Planning Committee has come out with a resolution that really responds to its charge, to prepare a balanced plan for physics," says Eugen Merzbacher, chair of the committee and a past president of APS.

In developing the SSC statement,

Statements from The American Physical Society

The following statements were passed by the council of The American Physical Society at its meeting in January.

On the SSC

To assure that the United States can educate an adequate supply of professional scientists and to provide the scientific underpinnings for a sound technological foundation, it is imperative that scientific research be broadly based. The rising cost of front-line research and the creation of promising new fields of physics has, during the last decade, rendered inadequate the support for broadly based physics research. Reversing this trend and strengthening the support for individual investigators must have the highest priority; it is essential to the scientific and technological future of the nation.

A vigorous research program is comprised of both a broad base and major research facilities, like the Superconducting Super Collider (SSC). The SSC will probe fundamental questions about the nature of matter and allow the US to remain at the forefront of elementary-particle physics. The SSC should be built in a timely fashion; but the funding required to achieve this goal must not be at the expense of the broadly based scientific research program of the US.

On the Manned Space Station

The council of The American Physical Society is concerned that there remains widespread public and governmental misunderstanding of the justification for the manned space station. After a review of the experimental program proposed for the space station, the council is

issuing the following statement:

It is the view of the council of The American Physical Society that scientific justification is lacking for a permanently manned space station in Earth orbit. We are concerned that the potential contributions of a manned space station to the physical sciences have been greatly overstated and that many of the scientific objectives currently planned for the space station could be accomplished more effectively and at a much lower cost on Earth, on unmanned robotic platforms or on the shuttle.

The United States needs a vigorous space science program, but such a program can be implemented for the foreseeable future without the proposed manned space station.

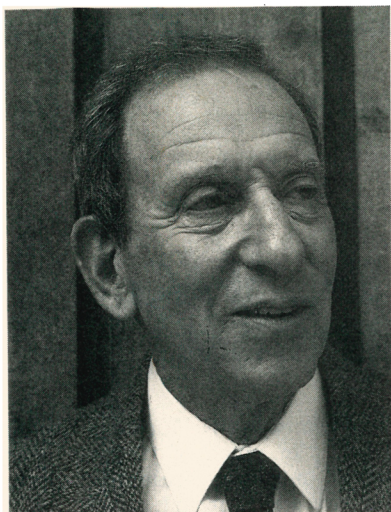
On Anti-Semitism in the USSR

The council of The American Physical Society expresses its deep concern over the apparent upsurge of anti-Semitism in the USSR, and in particular its impact on the freedom of scientists to pursue their work in the Soviet Union. Information received from sources and colleagues within the USSR indicates that Jewish scientists and Jews in general are being targeted, intimidated and beaten by members of reactionary organizations.

▷ APS condemns harassment of scientists based on their religious beliefs or ethnic origins;

▷ We call upon the Soviet Academy of Sciences and the scientific societies within the USSR to join us in condemning such acts; and

▷ We ask that the governments of the Soviet Union and the republics take steps to protect all their citizens from harassment and persecution based on religious beliefs or ethnic origins.



Eugen Merzbacher

the Physics Planning Committee considered a number of recent reports concerning the current status of the individual investigator. Among other things, committee members looked at the 1990 Survey of Young Physics Faculty (see *PHYSICS TODAY*, February, page 37), and a preliminary report on a soon-to-be-completed study of NSF funding for physics research. They also heard from Leon Lederman, president-elect of the AAAS and a PPC member, on the results of his informal poll of physics, biology and chemistry department heads at top research institutions (see *PHYSICS TODAY*, February, page 75). The Panel on Public Affairs also helped formulate the statement.

Merzbacher points out that the space station statement, which was initiated by the APS Panel on Public Affairs, was formulated with the assistance of representatives of the APS division of astrophysics, who polled leaders in their field for their opinions. The Physics Planning Committee also heard from the chief scientist of the space station, William L. Taylor, who agreed that purely scientific objectives are not the primary justification for the project.

The APS council is not the first body to cast doubt on the scientific justification for a manned space station. NASA's own advisory committee on the space station recently issued a report that states: "We do not believe that Space Station Freedom, as we now know it, can be justified solely on the basis of the (nonbiological) science it can perform, much of which can be conducted on Earth or by robotic spacecraft at lower cost." Previous statements by the American Geophysical Union and the Institute of Electrical and Electronics Engineers also questioned

NASA's overall priorities and its plans for a balanced space program.

The statement on anti-Semitism in the Soviet Union, drafted by the APS Committee on the International Freedom of Scientists, condemns the rise of anti-Semitism in the USSR and calls on the Soviet Academy of Sciences and other Soviet scientific soci-

eties to join in reversing this trend. A previous report in *PHYSICS TODAY* (March 1990, page 52) details the unleashing of anti-Semitic forces in the wake of President Mikhail Gorbachev's program of *perestroika*—a situation in which Jewish scientists and intellectuals have been especially threatened.

SPECIAL EVENTS SCHEDULED FOR APRIL MEETING IN WASHINGTON

Two special events are planned for the APS meeting on 21–25 April in Washington, DC: "Unity in Physics" Day and APS's first ever Congressional Day.

In light of the tremendous success of the program last year, APS will once again offer a "Unity in Physics" Day, which will feature speakers from various fields of physics, providing attendees with the opportunity to keep up with developments in areas other than their own.

The session, scheduled for 23 April, will include the following lectures:

- ▷ "A Physical System in Evolution: The American Physical Society," the retiring presidential address by Eugen Merzbacher (University of North Carolina, Chapel Hill)
- ▷ "Mapping the Universe" by Margaret Geller (Harvard-Smithsonian Center for Astrophysics)
- ▷ "Quantum Chaos: An Experimental View" by Daniel Kleppner (MIT)
- ▷ "Bizarre Two-Dimensional Quantum Fluids in High Magnetic Fields" by Horst L. Stormer (AT&T Bell Laboratories).

During Congressional Day, scheduled for 25 April, a hundred or so working physicists will pay visits to several hundred members of Congress and staff. Sponsored by the APS Physics Planning Committee, the event is intended to raise government awareness of the current state of science in the US. As an announcement of the event prepared by the APS office of public affairs states: "The vital economic and security interests of the US will be jeopardized if strong Federal action is not taken soon to remedy the precipitous decline in effective support for basic scientific research and graduate education."

In preparation for Congressional Day, the APS office of public affairs is organizing volunteer physicists into regional teams, which will be appropriately balanced by scientific discipline. The office will schedule each team to attend a series of meetings

with members of Congress who represent the team's region, as well as with members on House or Senate committees that have jurisdiction over science policy and funding. Each team will be given statistical material and briefing documents, and team members will be encouraged to describe their own experiences in science research and education in language that can be understood by nonphysicists.

The schedule for Congressional Day also includes a briefing with an address by Senator Albert Gore Jr on 23 April, and it concludes with a reception sponsored by Representative George Brown Jr—the new chairman of the House's Committee on Science, Space and Technology—on 25 April. Physicists who wish to receive additional information about Congressional Day or who wish to participate in the event should contact Tina Kaarsberg, APS Office of Public Affairs, telephone 202-232-0189; fax 202-328-3729. ■

Alabama Workshop

The APS–AAPT Local Physics Alliance Program, which is supported by the National Science Foundation, will hold a workshop at the State Park Resort Hotel in Gulf Shores, Alabama, on 3–4 May. The workshop is intended to assist high school and college physics instructors who wish to form local support networks to discuss new ideas in physics education. Participants from Alabama, southern Georgia, Mississippi, northwestern Florida and southeastern Louisiana are expected to attend.

Applications to attend the workshop are available from APS and must be returned by 29 March to Local Physics Alliance Network, APS, 335 East 45th Street, New York NY 10017; telephone 212-682-7341.