

more immediate priorities, such as full-time jobs or flood control," says a Senate staffer.

For their part, DOE officials claim the Senate will end up supporting the project. Greg Ward, the department's assistant secretary for Congressional and intergovernmental affairs, forecast that some 55 senators will vote for the SSC. Energy Secretary James D. Watkins confided to a reporter for *Inside Energy* that he is "cautiously optimistic" about the Senate vote. Senator Dale Bumpers, a Democrat of Arizona, promises to lead the fight to eliminate the SSC from the appropriations bill when it appears on the floor. Last year, Bumpers's attempt to drop the SSC from the appropriations bill failed by a 62-37 vote. He has expressed some doubt that he will be able to overcome the bipartisan coalition that backs the project. That group is led by Johnston and includes the influential Texas senators—Lloyd Bentsen, a Democrat, and Phil Gramm, a Republican. Bumpers claims that Bentsen convinced Alan Cranston, a California Democrat who has opposed the project, to reverse his position. Moreover, the proponents are gaining support as President Bush persuades the undecided in the Senate to join the backers. On 23 July, the day the Senate appropriations subcommittee met, the President invited five Republican senators to the White House to lobby for their support. Afterward, Alan K. Simpson of Wyoming and Mitch McConnell of Kentucky admitted to reporters that Bush had made such a persuasive case they are now leaning toward the SSC.

Johnston held a hearing on 1 July clearly intended to persuade his colleagues to save the super collider from going the way of the House cancellation. At the outset, with more than 200 scientists, reporters and lobbyists jammed into the Hart Building's largest committee room, Johnson stated that "all of us in Congress want to send a signal that we are fiscally responsible. . . . But let us not kill the most important science project in America in our quest to deal with the deficit." He went on to read the 26 June statement of the American Physical Society's executive board, expressing its dismay over the House action. The APS statement said: "While we strongly reaffirm the position of the APS Council that funding for the SSC not come at the expense of the broad base of American science, termination of the SSC would seriously disrupt progress in elementary-parti-

2100 Physicists Use a Democratic Process for the SSC

In his perceptive book *Why Americans Hate Politics* (Simon & Schuster, 1991), E. J. Dionne Jr, a *Washington Post* writer, asserts that politics in the US is "increasingly abstract, a spectator sport barely worth watching" and that "Americans have begun to doubt their ability to improve the world through politics." Long before the short, unhappy attempt by Ross Perot to revive the political interests of citizens, however, physicists showed an uncommon excitement about the democratic process. Possibly because they felt a sense of guilt for creating nuclear weapons, physicists took the lead in advancing arms control, in reducing cold war tensions and in deflating the overblown claims of "Star Wars" R&D. Last year many physicists sought to stay the hand of the Department of Energy in making deep cuts in the nation's principal research programs for nuclear and particle physics. A group of 11 prominent physicists, 7 of them Nobel Prize winners, sent a letter of protest to DOE officials; to D. Allan Bromley, the President's science adviser; and to members of Congress (see *PHYSICS TODAY*, December 1991, page 56). Within weeks, DOE reconsidered its proposed budget actions.

That worked so well, the same people decided to use a similar strategy after the House of Representatives scuttled DOE's 1993 budget request for the Superconducting Super Collider. Their letter was sent on 25 June to President Bush and to all House members who voted against the SSC on 20 June after supporting the machine last year. It was also mailed to every member of the Senate, which is preparing to vote on the SSC appropriation this month. The letter was signed by 40 physicists, including 21 Nobelists. They were joined in the following three weeks by 2032 scientists, of whom 1707 are in the US and 325 in foreign countries.

The text of the letter follows:

"We . . . are shocked and dismayed by the House rejection of funding for the Superconducting Super Collider. We are deeply alarmed by its immediate destructive effect on the entire US scientific enterprise and even more concerned about the serious long-term damaging consequences of this action.

"The approval of the SSC project in 1990 was widely acclaimed as our nation's firm commitment to be a leader in this scientific age. It has galvanized many foreign countries to follow us and collaborate on this unique common effort. It has also inspired our younger generation to be optimistic about their future in science and technology.

"The construction of the SSC is at the cutting edge of advanced technology and industrial capability. It will generate a large number of jobs and will greatly enrich the nation's technological strength through training, research and manufacture.

"At present, the scientific goals of the SSC are even more relevant and compelling than a few years ago. Furthermore, the SSC project has already made important scientific and technological progress in the design and development of the accelerator and detectors. At many international conferences, the initial achievements of the SSC project have been recognized as the symbol of our great strides forward in science and technology. This sudden rejection stuns and confuses. To kill an undertaking that is so splendidly fulfilling its expectations and its mission raises fundamental questions about our national commitment and our ability to carry out long-term scientific projects. Such an action is clearly damaging to future international collaborations on our scientific ventures.

"We are painfully aware of the need to bring the budget deficit under control. However, in this world of very rapid change where confidence in any country can be quickly eroded, it is essential for our nation to steadfastly preserve and expand its scientific and technological strength.

"The SSC is an investment for the future in science, technology and people. We therefore respectfully urge you to restore its funding."

Among the signers were Hans A. Bethe (Cornell), Sidney D. Drell (SLAC), Val L. Fitch (Princeton), Murray Gell-Mann (Caltech), Sheldon Lee Glashow (Harvard), Marvin L. Goldberger (UCLA), T. D. Lee (Columbia), W. K. H. Panofsky (SLAC), John Peoples Jr (Fermilab), Burton Richter (SLAC), Abdus Salam (International Centre for Theoretical Physics, Trieste), Nicholas P. Samios (Brookhaven National Laboratory), Frederick Seitz (Rockefeller University), Samuel C. C. Ting (MIT and CERN), Alvin W. Trivelpiece (Oak Ridge National Laboratory), James A. Van Allen (University of Iowa), Simon Van der Meer (CERN), Steven Weinberg (University of Texas) and Victor F. Weisskopf (MIT).

—IRWIN GOODWIN