for CON-X, a next-generation telescope that could image emissions from black holes.

▶ **Department of Energy.** Research and development funding at DOE would increase 5.7% to $8.5 billion, but most of that would go to defense activities. Funding for the Office of Science would remain flat at $3.3 billion. There would be a significant boost in funding for nanoscience with the reallocation of money that has been going for construction of the nearly completed spallation neutron source.

▶ **NIST and NOAA.** The National Institute of Standards and Technology would see its R&D budget decline 11.8% to $411 million. NIST's Advanced Technology Program would only receive enough money to close out contracts as the White House tries once again to kill the program. The National Oceanic and Atmospheric Administration's R&D budget would fall by 6.4% to $764 million.

▶ **Department of Homeland Security.** This department, officially created in January, would become a significant funding agency with a proposed R&D budget of $1 billion. Most of that money would be in the Directorate of Science and Technology. The directorate would have $801 million, which would include the Homeland Security Advanced Research Projects Agency (HSARPA).

▶ **National Institutes of Health.** After five years of appropriations that nearly doubled the NIH budget, the agency would receive only a 2% increase in FY 2004. NIH's National Institute of Allergy and Infectious Diseases, seen as important in the war on terrorism, would receive an 8.9% increase, but overall R&D would rise only 2% to $27 billion.

While the administration is promoting the substantial increases in its "priority programs," House Science Committee Chairman Sherwood Boehlert (R-N.Y.) described the overall science and technology budget as "disappointing." The administration "has acknowledged the importance of funding for basic research, particularly in the physical sciences," he said. "On the other hand, many science programs do not even keep up with inflation. In many areas . . . there aren't enough details yet to fully understand the proposals," Boehlert concluded. "Perhaps the best that can be said is that this budget document may have to be rethought in any event once Congress finally provides domestic appropriations for fiscal 2003." **Jim Dawson**

US Plans to Rejoin ITER Collaboration

President Bush, heeding recommendations from the fusion science community, the National Research Council (NRC), and the Department of Energy (DOE), authorized the US to rejoin the International Thermonuclear Experimental Reactor project. In a 30 January statement issued by the White House at the same time Secretary of Energy Spencer Abraham was announcing the ITER decision at the Princeton Plasma Physics Laboratory, Bush said, "The results of ITER will advance the effort to produce clean, safe, renewable, and commercially available fusion energy by the middle of this century."

The decision is an apparent victory for Ray Orbach, director of DOE's Office of Science, who has pushed hard for several months to get the administration to rejoin ITER. In a 3 February briefing announcing the president's proposed fiscal year 2004 budget, Orbach described fusion as an "energy source with unlimited amounts of potential" that could produce both electricity for commercial use and, as a byproduct, hydrogen that could fuel the hydrogen-powered "freedom car." The administration has proposed spending more than $720 million on R&D over five years to create the car.

In presentations last fall to the NRC's burning plasma assessment committee and DOE's independent Fusion Energy Sciences Advisory Committee (FESAC; see PHYSICS TODAY, November 2002, page 28), Orbach said the development of commercial fusion power was critical to help solve the global warming problem. President Bush and other administration officials don't share Orbach's alarm over global warming, however, and instead have tied the ITER decision to the hydrogen car development program.

Citing ITER's estimated cost of $10 billion, the US dropped out of the project in 1998. ITER was then scaled back to a projected $5 billion, which the administration deemed reasonable. The US expects to pay about 10% of the construction costs, or about $500 million over eight years. For the moment, administration officials are talking about a US cost of $50 million per year, but FESAC has estimated the US cost for becoming a full member to be about $100 million per year. In his budget briefing, Orbach said the difference in the two amounts is tied to distinctions between construction costs and operating costs. Construction isn't expected to begin until at least 2006, he said, "so the really heavy expenditures are not in this year or even next, but in the ensuing years." The earliest that ITER is expected to become operational is 2014. In the FY 2004 budget, the administration is asking for $12 million for "ITER negotiations and supporting R&D."

"Remember that all we've done so far is to rejoin the negotiations," Orbach said. "There are still going to be issues of site selection, the issues of what we will build, and so on. The $12 million will help us in those negotiations." Orbach said other US fusion programs would continue, but those involving burning plasma would be refocused to better support the ITER initiative.

ITER's current partners—Canada, the European Union, Japan, and Russia—have indicated that they expect to choose the ITER site by 2004. Proposed sites are in Canada, Europe, and Japan. China is also seeking to become a partner in ITER.

Jim Dawson

L'Oréal and UNESCO Award Women Physicists $500 000

Not just cosmetic: L'Oréal and UNESCO are rewarding five women from around the globe for their scientific contributions in crystallography, disordered materials, scaling laws of fluids and complex systems, and electron microscopy of crystals and quasicrystals.

This year's "for women in science" awards by cosmetics giant L'Oréal and the United Nations Educational, Scientific and Cultural Organization (UNESCO) recognize lifetime achievements by women in condensed matter sciences. The awards are in their fifth year, but this is the first time they've rewarded work in the physical sciences. The awards were also increased fivefold this year, with five women from five continents each receiving $100 000.

"It seems to me that giving due recognition to women scientists can create a useful psychological shock," Nobel laureate Pierre-Gilles de Gennes, who served as president of the awards committee, said in a statement when the winners were selected. Women are "often more perceptive" than men and they "know how to stand by" someone whose morale is flagging, de Gennes said of women in their capacity as research group leaders. "Men are not so good at this." He added that "women know better than