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A looming gap in UV astronomy

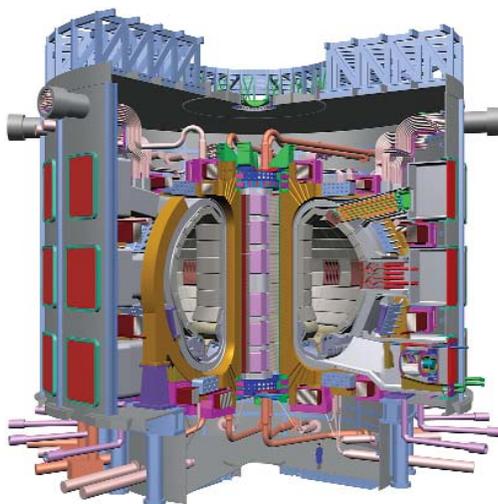
ITER

Crunch Time, Again, on Fusion Project

CAMBRIDGE, U.K.—A \$10 billion effort to harness energy from nuclear fusion was teetering on a knife edge earlier this week after another deadlocked meeting of its six international partners. Since last December, the six—China, the European Union, Japan, South Korea, Russia, and the United States—have been split over whether to build the International Thermonuclear Experimental Reactor (ITER) at Rokkasho in Japan or Cadarache in France. A meeting on 18 June threatened to turn into a bidding war as both Japan and the E.U. offered to up their contribution if they were to host the ITER tokamak. But European sources fear that Japan and the United States are on the verge of turning their backs on the partnership to build the tokamak themselves at Rokkasho.

After 2 decades of preparation for the grand experiment, which aims to reproduce the sun's furnace here on Earth, a decision on the site was expected by the end of 2003. But with the E.U. and Japan equally determined to play host, more technical studies were carried out, followed by a series of meetings exploring a "broader" fusion research program with other facilities that would speed the move to commercial reactors and could be sited in the nation that does not get to host the tokamak (*Science*, 2 April, p. 26).

Although the broad approach proved popular, neither the E.U. nor Japan wants to play second fiddle. Each has already promised to pay up to 48% of ITER's costs in re-



Fission over fusion. Both Europe and Japan have increased their offers to host ITER.

turn for the tokamak. In Vienna last week, both raised their bids to 50% and offered to pay up to half the cost—\$540 million—of a broadened program. "We still have mirror-

image proposals," says Bernard Bigot, France's high commissioner for atomic energy, who attended the meeting.

A day of reckoning may be looming. After the Vienna meeting, European sources told *Science* that Japan, with U.S. support, appears to be preparing to forge ahead without the backing of all the ITER partners. The U.S. delegation expressed at the meeting that one partner should be able to contribute more than half the project's costs; the E.U. delegates responded that ITER would then cease to be a true international collaboration. And the United States is said to have asked if money committed to the broader program could be diverted to ITER itself. Japanese delegates backed this idea, which suggests to some in Europe that Japan would use that money to push ahead on ITER with fewer partners.

An official at Japan's education ministry, which is responsible for fusion research, denied that Japan is considering unilateral action. "The basic policy is still to make ITER a six-country collaboration," he says. But Achilleas Mitsos, E.U.'s research chief, has his doubts. "The Japanese didn't say they would go it alone, but I wouldn't be surprised."

The issue may soon come to a head. The U.S. delegation is said to be pressing for a decision by the end of June.

—DANIEL CLERY

With reporting by Dennis Normile in Tokyo.

EUROPEAN FUNDING

E.U. Proposes Bigger Framework Plus a Bonus for Researchers

BERLIN—Researchers got some good news from the European Union last week, but with a sting in the tail. The European Commission (EC), the E.U.'s executive body, committed itself on 16 June to creating a new funding body that will support fundamental research based on quality alone, something researchers have wanted for several years (*Science*, 2 January, p. 23). But the EC intends to bankroll this European Research Council (ERC) by doubling the budget of its vast and unwieldy Framework program from its current \$6 billion to an average of \$12 billion per year from 2007 to 2013.

In its current form, Framework concentrates on applied research and will only fund collaborations between labs in more than one member state. It has been roundly criticized by researchers for being a bureau-

cratic nightmare. A campaign has been building for an ERC more sympathetic to the needs of basic researchers and separate from the E.U. bureaucracy. One group of scientists called on the E.U. to cut the Framework budget in half and divert the extra money to launching an ERC.

The EC's latest proposal, however, points in the opposite direction. It has called for the budget of the next multiyear program, Framework 7, to double that of Framework 6—with part of the increase going to launch an ERC within the program. The expanded budget would also include new funding for space science and security research. "This is what we've been fighting for," says Erwin Neher of the Max Planck Institute for Biophysical Chemistry in Göttingen, Germany, and a member of the EC's European Re-

search Advisory Board (EURAB). "That the commission has grabbed on to this idea is a very good sign."

Supporters of the ERC have worried that any program administered by the E.U. would have the same headaches as Framework, but Mogens Flensted-Jensen of the Royal Veterinary and Agricultural University in Frederiksberg, Denmark, who helped organize one of the first meetings calling for an ERC, says he is optimistic. "If they decide to spend more money, I think we will see a semi-independent ERC" funded by Framework 7.

Any funding increase has to be approved by the Member States' finance ministers and the newly elected European Parliament. But the political momentum is behind the EC's proposal, says Helga Nowotny of the Swiss ▶

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