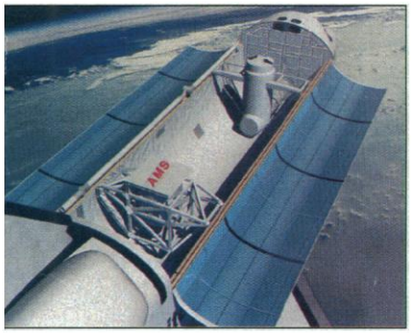
SCIENCESCOPE

edited by CONSTANCE HOLDEN

Nothing the Matter With Antimatter Probe

Perhaps as an anticlimax to press reports of trouble with the antimatter experiment aboard the space shuttle last week, NASA officials insist the controversial instrument functioned just fine.

The 4-ton Alpha Magnetic Spectrometer (AMS), intended as a scientific centerpiece of the International Space Station, is designed to look for particles of antimatter left over from the big bang as well as indirect signs of "dark matter." Some experts, however, contend that the AMS is unlikely to find its quarry and that the experiment, headed by Nobel Prize–winning MIT physicist Samuel Ting, has not undergone proper peer review (*Science*, 29 May, p. 1339).



CERN LABORATORY

Fit for the big time. AMS aboard the space shuttle.

The agency confesses to one glitch: The TV channel on the shuttle Discovery that was supposed to transmit data continuously during the flight failed shortly after launch. That prevented scientists on the ground from getting the stream of real-time data they needed to calibrate and fine-tune the AMS. The breakdown sowed confusion: Some press organs, such as the *Orlando Sentinel*, said the AMS experiment was "ruined," even as Ting was saying everything was fine. The shuttle returned on schedule to Cape Canaveral on 12 June after a 10-day orbit.

Because of the communication breakdown, the instrument still needs to be calibrated—that is, it needs to be subjected to known amounts of particle bombardment to assess just how well it's detecting, says NASA AMS program manager Mark Sistilli. So it will probably be flown to a particle accelerator in Europe where European collaborators can calibrate it on the ground, he adds. In the meantime, Sistilli says, hundreds of scientists around the world are hungry to get their hands on the 100 hours of data tapes and start their needle-in-a-haystack search for antimatter.

Politics and Peer Review

Representative James Sensenbrenner (R–WI) loves peer review—except, apparently, when it favors a non–U.S. site for a major scientific facility.

Speaking on 11 June to a group of visiting Korean science officials, the chair of the House Science Committee proclaimed that peer review was "the best way of funding science that I've seen in my 20 years in the House." But just 2 days earlier, he had written an angry letter to NSF director Neal Lane asking Lane to overturn the judgment of scientists who reviewed the proposed $100 million Pierre Auger Cosmic Ray Observatory—even before the results have been announced.

A team led by Nobel laureate physicist Jim Cronin of the University of Chicago is seeking $15 million from NSF and the Department of Energy (DOE) to help build the array of detectors, which would target very high energy cosmic rays, at sites in Argentina and Utah. But reports that the reviewers have settled on a two-step approach, starting with Argentina, prompted the letter from Sensenbrenner and a Utah colleague, Representative Merrill Cook.

"We are concerned NSF may propose funding the Argentine portion of the project while deferring to some future date, if at all, construction of a similar detector in Utah," they wrote. "We urge you to support simultaneous construction of both observatories." The letter also warns about congressional concern over "the use of U.S. funds to support foreign science."

NSF and DOE officials say no decision has been made but that the idea of building the observatory in two stages, starting with Argentina, is on the table. Cronin says he's "pleased" Sensenbrenner sent the letter and plans to continue fighting for both sites.

Germany's Biotech Juggernaut

In yet another sign that Germany is overcoming its post-Hitler phobia about genetic research, officials have unveiled a new national program to stimulate biotechnology. At a New York press conference held on 16 June, German Science Minister Jürgen Rüttgers said the program, called BioFuture, is intended to lure young scientists doing cutting-edge research to set up groups at German research centers. So far 200 researchers, 10% of them non-Germans, have applied for grants from the 150 million DM ($83 million) fund, which will subsidize them in institutes that have space but can't afford to hire them. The first of what will eventually be 50 BioFuture recipients will be announced in August.

Hacker Hits DOE Lab

Managers at the Stanford Linear Accelerator Center (SLAC) in California are scrambling to make their computers more secure after a hacker penetrated the system.

More than 2800 physicists around the world who regularly log into SLAC were locked out from 3 to 9 June after the Department of Energy shut the system off to outsiders while the lab looked for damage. "The scary thing was the potential for damage ... that could have been incalculable" in terms of data loss and invasion of personnel records, says SLAC spokesperson P. A. Moore.

Another lab official suspects that the hacker sniffed out a password used by a researcher in a country that prohibits encryption, such as France. This week a task force was set up to figure out how to prevent a recurrence. It's tricky, says Moore, "since we are an open research facility," and creating barriers goes against that philosophy.

Ag Research Windfall in Jeopardy

A new program just approved by Congress to infuse $600 million into agricultural research now looks decidedly shaky: Last week, House budgeteers wiped out its 1999 allocation.

The authorization bill that passed both houses this spring would have allocated $600 million over 5 years for a wide range of agricultural research projects (*Science*, 12 June, p. 1681). The program was to be paid for out of food stamps savings—so it didn't require appropriators' approval.

But last week, the House agriculture appropriations subcommittee chose to redirect the $120 million allotted for 1999 in its markup. A staffer explains that the subcommittee's overall budget—$13.6 billion—was $150 million smaller than last year, so lawmakers decided to raid the new program, partly to avoid cutting existing research funds. All hope is not lost, however: The Senate appropriations committee last week let stand the full $120 million, so it could be restored when the two houses meet to hammer out a compromise bill.

Ag research was dealt yet another blow last week. Both Senate and House appropriators also zeroed out $60 million for the U.S. Department of Agriculture's Fund for Rural America, one-third of which was to go for applied research.