

CERN physicists want more time to look for Higgs boson

Geneva The observation of a new 'event' that could be explained by the presence of the elusive Higgs boson has increased the probability that scientists at CERN, the European Laboratory for Particle Physics, really have seen the particle.

It has also led to demands that CERN's Large Electron-Positron collider (LEP), whose planned closure one month ago was postponed until this week to follow up earlier hints that Higgs had been spotted (see *Nature* **407**, 118; 2000), be kept running still longer — some suggest for up to a year.

Scientists working on the four experiments that are dedicated to searching for the subatomic particle will tomorrow (3 November) present the data they have gathered during the collider's one-month stay of execution. They are particularly excited about the new event because it was observed in an experiment where no events had previously been seen.

The researchers hope that the data will persuade CERN management to keep the collider operating. The choice is a difficult one, as an extension could lead to potentially expensive delays in the construction of the LEP's high-energy successor, the Large Hadron Collider. A final decision is expected next week.

Global warming happening faster than predicted

Washington Global warming could be happening more rapidly than previously estimated, leading to an average temperature increase of as much as 6 °C over the next century, according to the latest assessment by the Intergovernmental Panel on Climate Change (IPCC).

The report, which was leaked in advance of its expected completion in January next year, predicts that global warming will be greater than the IPCC's earlier assessments in 1990 and 1995. The panel had previously estimated the maximum likely temperature increase at around 3 °C.

The IPCC is also expected to be more assertive in its language, attributing the effect to greenhouse gases. Governments meet in two weeks time in The Hague to try to iron out the details of the Kyoto Protocol, the agreement that they reached three years ago to reduce greenhouse gas emissions.

Wings hold key to flexible boat mast

London It is not yet plain sailing, but a design of boat mast based on the bone structure of bat and bird wings has the finish line in sight



Flying high: Richard Dryden took inspiration from wings for his mast design.

after winning £45,000 (US\$65,300) from the UK's National Endowment for Science, Technology and the Arts.

The funding will help University of Plymouth biologist Richard Dryden to develop his transitional sailing rig, which changes shape according to wind conditions. Extended fully in light breezes, the jointed mast and sail becomes more swept back and flexed when the wind picks up.

Europe goes public over software patenting

Brussels The European Commission has launched a public consultation to help it handle the political and economic hot potato of whether computer software should be patentable.

The commission believes that Europe's lack of harmonized legislation on the issue may be a potential barrier to industrial growth, competitiveness and the development of the internal market.

The issue has prompted considerable debate in Europe. Supporters say software patents, such as those allowed in the United States, stimulate innovation. But critics claim they stifle competition. The consultation document is available on the commission's website until 15 December, and a decision is expected early next year.

► http://europa.eu.int/comm/internal_market/en/intprop/indprop/softpaten.htm

NASA plans smarter Mars landers

Washington As part of its revamped programme for exploring Mars, the American space agency NASA last week announced plans to develop 'smart' landing technology by 2007.

"Previously, spacecraft, like Mars Pathfinder, had no control over trajectory," says Firouz Naderi, head of the Mars Program Office at NASA's Jet Propulsion Laboratory in Pasadena, California. "We're looking at a class of lander that will recognize any deviations from the desired path and make corrections to get back on course."

The spacecraft should also be able to

ensure it reaches its destination in one piece. "The smart lander will be able to tell, using radar or some sort of camera, whether there are any ominous hazards directly below it," Naderi says, "and it will have the capability to move laterally as much as a football field length away, so it can land safely."

Salmonella pioneer wins Germany's top science prize

Munich Microbiologist Stanley Falkow of Stanford University this week won Germany's top science award, the Robert Koch prize, for his work on *Salmonella*, which has led to a new understanding of how pathogens spread. The annual prize is intended to promote the study of infectious diseases and other illnesses.

At the same ceremony, Swiss biologist Marco Baggiolini received the Robert Koch gold medal for his research efforts in identifying blood proteins that help the body fight off bacteria and viruses. Baggiolini, director of the University of Bern's Theodor Kocher Institute, is an acknowledged pioneer in the microbiology of the immune system.

US librarians worried by publishing merger

Washington US librarians have written to the Justice Department seeking the government's intervention to stop the merger between the European journal publisher Reed Elsevier and its US rival Harcourt General. The latter's range of publishing businesses include Academic Press, which will be merged with Elsevier Science.

According to Elsevier, the deal announced last week, under which it has paid \$4.5 billion for Harcourt General, will allow joint sales to grow "significantly faster" than the predicted 4–5% growth rate in demand for scientific information. The Association of Research Libraries is concerned that, by creating a concentration of power in the market for high-quality biomedical journals, attempts to achieve this goal will fuel a significant increase in subscription prices.

More money promised for Russia's research institutes

Moscow Yuri Osipov, president of the Russian Academy of Sciences, last week told the academy's praesidium that the government has promised the organization an additional 53 million rubles (US\$2 million) before the end of the year.

The money comes out of the 800 million rubles that the government has earmarked for optional expenditure, rather than committed expenditure such as salaries. The extra money will arrive at the peak of subscription renewal demands for scientific journals.