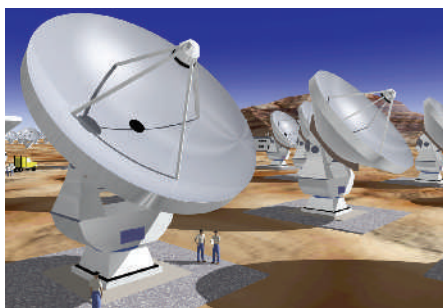


ESO



False economy? Making the Atacama Large Millimeter Array smaller would harm its science.

US academy counts cost of shrinking radio telescope

One of the world's largest radio telescopes, being built in Chile, may be cut back so much that its scientific importance will be limited.

Originally expected to cost US\$650 million, the Atacama Large Millimeter Array (ALMA) is now overrunning its budget, prompting officials to consider cutting the number of planned operational antennas from 60 to 50 or even 40. A report issued on 10 June by the US National Academy of Sciences, says that either change would prevent the project from producing revolutionary science, although it still might yield "transformational results".

The antennas will detect millimetre- and submillimetre-length electromagnetic emissions from embryonic stars, planets and galaxies.

ALMA is a project of the US National Radio Astronomy Observatory, the European Southern Observatory and Chile. In April, the telescope's governing board decided that a minimum of 50 antennas would be acceptable. A final decision on the number of antennas could come by the end of the year.

Abstentions scupper vote on Italian fertility laws

Italian biologists were disappointed on 13 June by the failure of a referendum that would have relaxed the country's strict fertility laws.

Barely half the 50% of voters needed to reach a quorum turned out, in part because the Vatican called for a boycott of the poll. Among other things, the proposal would have legalized preimplantation genetic diagnosis and research on human embryonic stem cells.

Scientists campaigning for a 'yes' vote complained that the 'no' camp misinformed the public about the issues and acted undemocratically in urging abstention.

The scale of the defeat means that there is unlikely to be another chance to liberalize the laws in the near future.

Rocky planet is smallest seen beyond Solar System

Astronomers have found the smallest planet yet outside our Solar System, weighing in at just seven-and-a-half times the mass of Earth. Its discoverers say that the planet is likely to be rocky, rather than a gas giant like Jupiter.

"This is the smallest extrasolar planet yet detected and the first of a new class of rocky terrestrial planets," says Paul Butler of the Carnegie Institution in Washington, part of the team that found the planet. "It's like Earth's bigger cousin."

The planet orbits the star Gliese 876 once every two days. The star, a red dwarf that lies 15 light years from our own Solar System, is already known to have two Jupiter-sized planets.

The planet's surface temperature probably exceeds 200 °C, the astronomers say, because the planet orbits just 3 million kilometres from the star, more than ten times closer than Mercury's orbit is to the Sun.

Study calls for controls on marine bioprospecting

An international system is needed to protect the oceans from damage by bioprospecting, says a new study from the United Nations University in Yokohama, Japan.

The report, issued on 8 June in Tokyo, is intended to influence a UN workshop next March on expeditions in international waters. The report's authors worry that

some nations could unfairly exploit deep-sea resources.

The United States, Japan and France are expected to be the strongest opponents of limits on exploration. The demand for new drugs and industrial materials has recently targeted marine organisms, particularly extremophiles that live in high-pressure, high-temperature environments (see *Nature* 429, 598; 2004).

▶ www.ias.unu.edu/binaries2/DeepSeabed_final.pdf

Libyan police cleared of torturing Bulgarian nurses

A Libyan court last week cleared nine policemen of torturing a group of foreign medical workers in a Tripoli jail.

The five Bulgarian nurses and a Palestinian doctor were sentenced to death in May 2004 after being convicted of deliberately infecting hundreds of children with HIV. But the six say that their confessions were extracted under torture.

The policemen's acquittal on the torture charges is "a matter for serious concern", says Benita Ferrero-Waldner, the European Union's commissioner for external relations. She says that during a recent visit to Libya, authorities assured her that due process of law would be upheld.

"We have been extremely disappointed by the procedures in this trial," she says. Libya's supreme court will rule on the medics' fate in November. Given last week's verdict, Ferrero-Waldner says, it is essential that the court should "bring this issue to an appropriate and humanitarian conclusion".

Australia plans 'test-tube' sharks to aid ailing species



Life is tough for the grey nurse shark (*Carcharias taurus*). From the moment it hatches inside its mother's uterus, a baby grey nurse has to avoid being devoured by its siblings. Only one embryo will survive the intrauterine cannibalism — and this survivor faces a bleak future.

Hunting has slashed shark populations to critical levels. For decades, the fearsome-looking grey nurse shark was targeted as a possible man-eater, although it prefers fish to surfers.

Now Australian scientists hope to bolster shark numbers by growing embryos in fake uteruses. A team at New South Wales's Department of Primary Industries plans to remove fertilized eggs from wild females before the embryos start eating each other. The eggs will be reared in artificial humidicribs until the pups are old enough to fend for themselves.

Conservation groups say that instead of hatching 'test tube' sharks, more effort should be spent on protecting the sharks' natural habitat and breeding grounds.

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