

FACILITIES

LIGO in India

A planned Indian outpost of the Laser Interferometer Gravitational-Wave Observatory (LIGO) will probably be built in Marathwada in the west of the country, after the state of Maharashtra announced on 4 October that it had approved a 40-hectare site for the laboratory. LIGO-India will join a global network of gravitational-wave sensors; these include the two US sites, in Washington state and Louisiana, that this year reported the first detection of the waves.

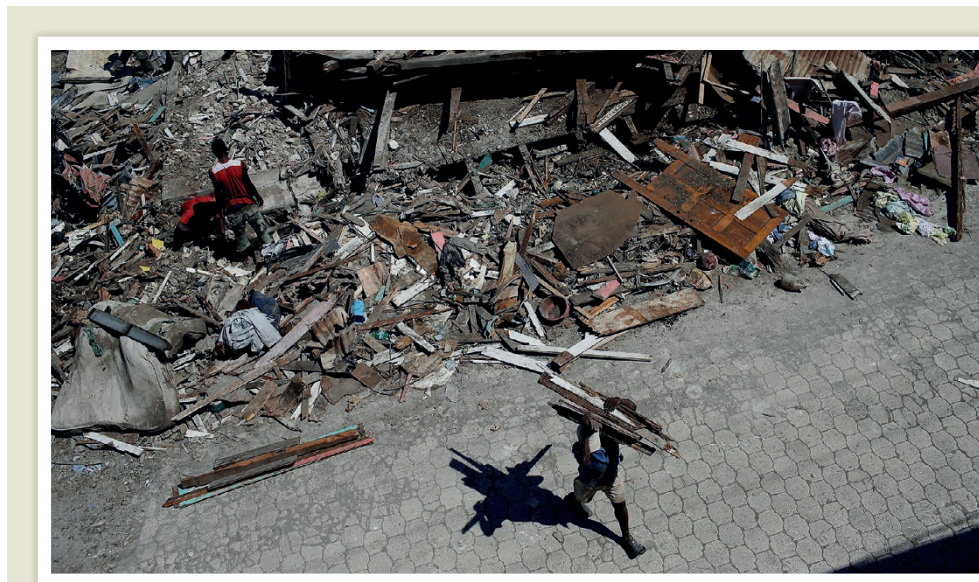
Ukraine joins CERN

Ukraine has become an associate member of CERN, Europe's particle-physics lab near Geneva, Switzerland. The move allows Ukraine to hold and attend meetings of the CERN Council, but without voting rights. Yuriy Klymenko, Ukraine's ambassador to the United Nations in Geneva, called the move, announced on 5 October, "an extremely important step on the way [to] Ukraine's European integration". Ukraine becomes CERN's fifth associate member, alongside Serbia, Cyprus, Turkey and Pakistan.

EVENTS

Foreign experts

Academics were enraged last week by the assertion that the UK government had barred foreign academics from advising on Brexit projects. Reports emerged on 7 October that the Foreign and Commonwealth Office (FCO) had told the London School of Economics and Political Science (LSE) that it would not take advice from academics who did not hold UK passports. Whether this



CARLOS GARCIA RAWLINS/REUTERS

Haiti faces cholera in hurricane's wake

Hurricane Matthew has swept a path of destruction across the Caribbean, killing at least 1,000 people when it hit Haiti on 4 October. Fears of a cholera outbreak are rising there in the wake of the storm, with at least 13 deaths from the disease reported so far. Matthew was the first category-5 hurricane in the Atlantic since Hurricane Felix in 2007. Its high winds

and heavy rains continued north but skirted the coast of Florida, where damage was less than originally feared. Only minor damage was reported by NASA's Kennedy Space Center, where the next-generation GOES-R weather satellite is awaiting launch to improve forecasts of, among other things, Atlantic hurricanes. The US death toll was reported to be at least 20.

communication did actually happen is unclear. The LSE maintains that it did, but the FCO — without commenting directly on the LSE's claim — has said that it will continue to take advice from "the best and brightest minds, regardless of nationality".

Detained physicist

On 7 October, France's supreme administrative court, the State Council, refused an appeal by particle physicist Adlène Hicheur to have his house arrest lifted. Hicheur has previously been jailed in France for terrorism-related offences — charges vigorously disputed by his colleagues — and had restarted his research life in Brazil following his release in 2012. In July this year, he was

deported to France and placed under house arrest, under state-of-emergency powers introduced there following terror attacks. His ordeal has been widely condemned by his physicist colleagues. In a further twist last weekend, Hicheur, who has French and Algerian nationalities, sought to extricate himself from the situation by requesting that his French nationality be revoked and that he be immediately expelled from France.

Kennewick man

The US House of Representatives has passed legislation to return controversial human remains to Native Americans in Washington state. The fate of the 8,500-year-old 'Kennewick

Man', a near-complete human skeleton, has been debated since its discovery in 1996. The case pitted scientists who wished to study the remains against Native American tribes that saw them as belonging to an ancestor. The bill must be reconciled with similar legislation passed last month by the Senate, and it will require the president's signature.

CLIMATE CHANGE

Aviation emissions

After 3 years of debate, negotiators from 191 countries struck a deal to reduce carbon emissions from international aviation. The agreement, made on 6 October at a meeting of the International Civil Aviation Organization in

JEFF CHIU/AP PHOTO

Montreal, Canada, establishes standards for energy efficiency and an emissions-offsetting programme that will see the aviation industry invest in projects to reduce emissions in other sectors. The programme could cover an estimated 75% of emissions growth from 2021–35, resulting in 2.5 billion tonnes of carbon offsets — equivalent to more than 6 years of UK carbon emissions. Aviation accounts for 2% of global carbon emissions.

Climate amendment

United Nations delegates meeting in Kigali, Rwanda, are finalizing an amendment to the Montreal Protocol whereby the treaty will target greenhouse gases as well as substances that destroy ozone. The decision to rapidly phase out hydrofluorocarbons — refrigerants that are powerful greenhouse gases — was taken last year, and described as “welcome — and long overdue” by *Nature* at the time (see *Nature* 527, 133; 2015). Delegates are likely to take until the meeting’s final day on 14 October to hammer out the details of the amendment.

BUSINESS

Theranos cuts

Beleaguered blood-testing company Theranos of Palo Alto, California, announced in an open letter on 5 October that



it is closing its clinical labs and laying off some 340 employees — about 40% of its staff. The company had faced huge scepticism over its claims that it could perform hundreds of diagnostic tests using a single drop of blood. In July, US regulators banned its chief executive, Elizabeth Holmes (pictured), from running a lab for two years. Holmes said that the company will continue to develop its miniaturized blood-testing device, miniLab. Further troubles emerged on 10 October, when a shareholder company announced that it would be suing Theranos to recoup its investment of nearly US\$100 million, which it says was secured on the basis of lies.

RESEARCH

Telescope time bias

Female scientists are allocated less telescope time at the European Southern Observatory than are their male colleagues, according to an analysis posted on

arXiv on 5 October (F. Patat Preprint at <https://arxiv.org/abs/1610.00920>; 2016). The study of more than 13,000 proposals and 3,000 principal investigators found that 16% of proposals submitted by women were successful, whereas men had a success rate of 22%. Much of the disparity seems to be because men submitting proposals have more senior positions on average than women, the study says, and astronomers at higher career levels received greater ratings for their proposals during the review process.

AWARDS

Chemistry Nobel

Jean-Pierre Sauvage, Fraser Stoddart and Bernard Feringa shared the 2016 Nobel Prize in Chemistry, announced on 5 October, for their work on creating tiny molecular machines. The three have made molecular knots, shuttles, rotors, chains, pumps, axles, switches, memory devices and even a nanocar — all at the molecular scale. The nanoscale machines are yet to find applications, but researchers hope that their uses could range from delivering drugs to computer memory (see page 152). Separately, Yoshinori Ohsumi, the cell biologist who won the 2016 medicine Nobel, announced that he would use

COMING UP

16–21 OCTOBER

The American Astronomical Society’s planetary-sciences division and the European Planetary Science Congress meet in Pasadena, California. aas.org/meetings/dps48

1–10 NOVEMBER

The first Berlin Science Week brings together academics and institutions from all over the world to discuss science and society. www.berlinscienceweek.com

the 8 million Swedish kronor (US\$940,000) awarded to establish a system to provide support for young researchers over decades.

Research jackpot

A US\$75-million grant for research into coronary heart disease has been awarded to a team led by Calum MacRae, chief of cardiovascular medicine at Brigham and Women’s Hospital in Boston, Massachusetts. The money is from the One Brave Idea fund, set up by the American Heart Association, Verily Life Sciences (owned by Google’s parent company, Alphabet) and drug firm AstraZeneca to fund research on the most common type of heart disease in the United States. The grant, an unusually large sum for a single team, will be delivered in \$15-million chunks over five years.

CORRECTION

The item ‘Nuclear go-ahead’ (*Nature* 537, 455; 2016) should have said that Hinkley Point C is expected to supply 7% of UK electricity — not energy — demand.

NATURE.COM

For daily news updates see: www.nature.com/news

SOURCE: GOOGLE FINANCE

TREND WATCH

Investors fled on 5 October when a drug company focused on RNA-interference (RNAi) therapies announced that it would abandon one of its lead drug candidates amid safety concerns. The drug, revusiran, was in phase III clinical trials to treat a form of amyloidosis. The news sent stock in Alnylam Pharmaceuticals of Cambridge, Massachusetts, plummeting by roughly 50%. Companies have struggled to translate RNAi into therapies, and investors have been lukewarm on biotech stocks this year.

RNAi-DRUG FAILURE SENDS STOCK TUMBLING

Alnylam Pharmaceuticals’ share price crashed by about 50% on 5 October, after the company halted a phase III trial of a drug that uses RNA interference.

