

SEVEN DAYS

The news in brief

PUBLISHING

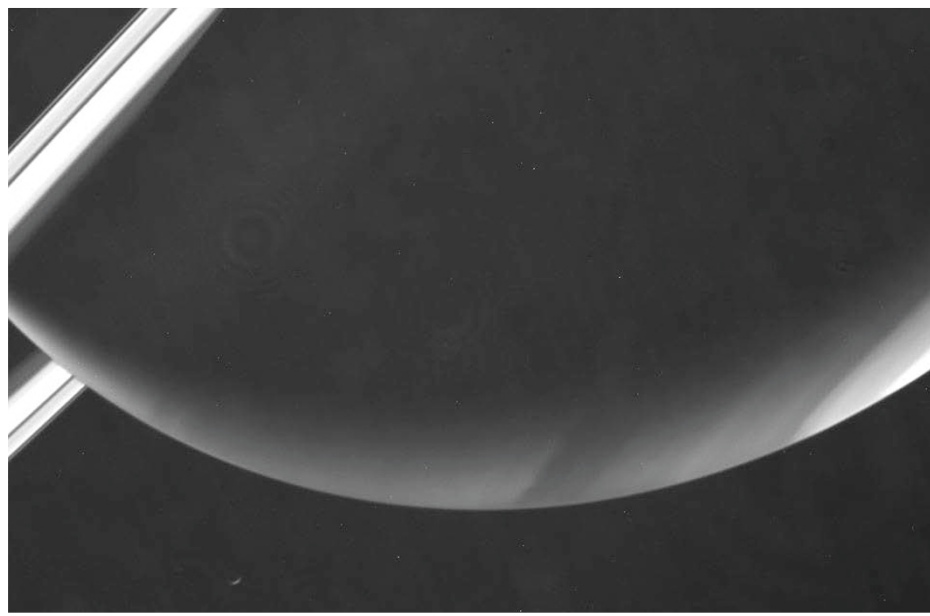
Physics for all

Particle physicists will soon be able to publish open-access papers in three journals of the American Physical Society (APS), including *Physical Review Letters*, free of charge. The deal, announced on 27 April, was struck between the APS and CERN, the European particle-physics laboratory in Switzerland. From January 2018, high-energy physics research done anywhere in the world will be able to be published open-access in the journals, and at no direct cost. Publication fees will be covered by the Sponsoring Consortium for Open Access Publishing in Particle Physics (SCOAP³), an international partnership set up in 2012 that is funded in large part by libraries. CERN's Large Hadron Collider already had an open-access agreement with the APS.

FUNDING

Cash boost

BioRxiv, a free online archive for draft versions of biology research papers, is to receive a windfall from the philanthropic Chan Zuckerberg Initiative (CZI), founded by Facebook co-founder Mark Zuckerberg and his physician wife Priscilla Chan. On 26 April, the initiative announced a multi-year funding package — the terms of which have not been disclosed — for expanding the popular preprint server, which posted its 10,000th manuscript last month. The new money will pay for staff and technology development at bioRxiv, says John Inglis, the executive director of Cold Spring Harbor Laboratory Press and co-founder of the 3-year-old site. See go.nature.com/2orzicd for more.



NASA/JPL-CALTECH/SPACE SCIENCE INSTITUTE

Cassini catches new views of Saturn

NASA's Cassini spacecraft plunged between Saturn and its rings on 26 April, beginning the final stages of its 20-year mission. At its closest, Cassini whizzed just 300 kilometres from the innermost visible edge of Saturn's rings and 3,000 kilometres above the top of

the planet's clouds. The images sent back include this close-up shot of Saturn's surface. The spacecraft is exploring this never-before-visited region of the Solar System on its way to a final plunge into Saturn's atmosphere in September.

POLICY

UK research reform

On 27 April, the British parliament approved a controversial package of reforms to the organization of UK research and universities. Nine research-funding agencies, including Britain's seven research councils, will now be merged into a new body, called UK Research and Innovation. The organization will oversee annual spending of more than £6 billion (US\$7.8 billion). Parliament's unelected upper chamber, the House of Lords, had forced the government into a number of compromises in the reform, including safeguards for institutional autonomy and

the independence of research funding from political interference.

Stem-cell payout

Allegations of fraud at a US stem-cell laboratory have led to an order for Partners HealthCare System and Brigham and Women's Hospital (BWH) of Boston, Massachusetts, to pay US\$10 million to the government. The settlement, announced by the US Department of Justice on 27 April, came in response to charges that the laboratory of former BWH researcher Piero Anversa used manipulated and falsified data about his research involving cardiac stem cells in applications for federal

research funds. Anversa and a colleague sued the hospital in 2014, charging that its investigation of the allegations had damaged their careers. That lawsuit was dismissed.

Offshore drilling

President Donald Trump has asked the US Department of the Interior to reopen Arctic federal waters for oil and gas drilling. On 28 April, Trump signed an executive order to lift restrictions on offshore mineral exploration in the Beaufort and Chukchi seas. The controls had been imposed by Barack Obama's administration in response to environmental concerns. The order also asks for a review of the five-year plan to sell oil and gas leases in

ERIC VIDAL/REUTERS

parts of the Gulf of Mexico and Atlantic Ocean — areas that the previous administration had closed to offshore exploration and development.

Fishy results

Sweden's Central Ethical Review Board has ruled that two researchers at Uppsala University have been guilty of "scientific dishonesty" in relation to a study published last year in *Science* (O. M. Lönnstedt and P. Eklöv *Science* **352**, 1213–1216; 2016). The board says that the paper by Oona Lönnstedt and Peter Eklöv on the claimed harmful impact of microplastics on certain fish larvae should be withdrawn. Uppsala University says it will consider this report alongside an earlier report conducted by the university itself, which found no misconduct.

POLITICS

Legal concerns

Hungary's revised higher-education law is incompatible with internal market freedoms and the right of academic freedom in the European Union (EU), the European Commission said on 26 April. The contentious law, which was passed by the Hungarian parliament on 4 April, bars international universities from operating in Hungary unless they have a campus



in their home country. The commission sent Budapest a letter of formal notice, outlining legal concerns, to which the Hungarian government has one month to respond. Speaking in the European Parliament on 26 April, Hungary's Prime Minister Viktor Orbán (pictured) rejected accusations that the law would specifically target the Central European University in Budapest.

PEOPLE

Leadership row

Cell biologist Mary Beckerle has been invited to return to her position as head of the Huntsman Cancer Institute, housed at the University of Utah in Salt Lake City but mainly funded by billionaire Jon Huntsman. Last month, Vivian Lee, dean of the university's school of medicine and senior vice-president for health sciences, fired Beckerle for undisclosed reasons. In

response, institute staff raised protests and Huntsman threatened to revoke a planned donation. Following Beckerle's reinstatement on 25 April, Huntsman released a statement pledging US\$120 million to the institute. On 28 April, Vivian Lee resigned from her leadership positions.

Preventive arrest

Stem-cell maverick Davide Vannoni was arrested in Turin, Italy, on 26 April after police phone taps indicated that he was seeking new foreign locations to continue his outlawed therapy, according to news reports. Vannoni had been sentenced to jail for conspiracy and fraud for administering unproven stem-cell therapy in Italy to people with incurable diseases through his Stamina Foundation. The sentence was suspended in March last year in a plea bargain — on the condition that he cease offering the treatment. Vannoni continued treating people in the Republic of Georgia until the government there banned him in December.

Physicist fired

Physicist Etienne Klein has been sacked as president of the Institute for Advanced Studies for Science and Technology (IHES) in Paris following a series of allegations of plagiarism in his articles

COMING UP

8–18 MAY

Details of the Paris climate agreement are negotiated at a United Nations climate-change conference in Bonn, Germany.

go.nature.com/2pawcvq

8–9 MAY

Scientists discuss trends in genome editing at a CRISPR congress in London.

www.crisprcongress.com

9–13 MAY

The annual Biology of Genomes meeting takes place in Cold Spring Harbor, New York.

go.nature.com/2qm5aha

and books for the general public. Klein's dismissal was announced in the French government's official journal on 28 April. He is replaced by Antoine Petit, head of INRIA, France's national computer-science agency.

CONSERVATION

Poor protection

A cross-party group of UK politicians has rebuked the country's government over its ocean-protection record. In a report released on 25 April, the Environmental Audit Committee says marine protected areas around the coasts of the British Isles are not managed properly and that vulnerable sites and species are not suitably protected. The committee says it is also "shocked and disappointed" that the government will not be creating reference sites to help gauge the success of the network of protected areas. Only 50 marine conservation zones have been created in British waters, whereas 127 were recommended in 2011.

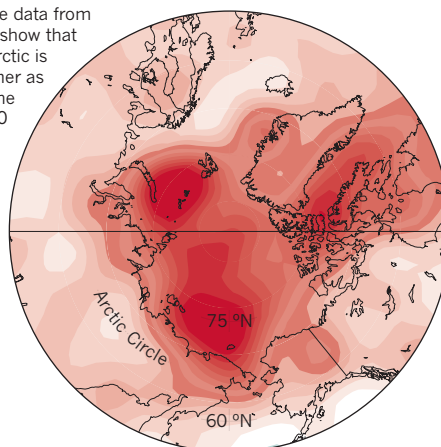
TREND WATCH

The Arctic is warming more than twice as fast as the rest of the planet. A report by the Arctic Monitoring and Assessment Programme finds that the region was warmer between 2011 and 2014 than at any time since records began around 1900. The rapid warming is hastening the melting of glaciers and sea ice, and boosting sea-level rise. The extent of snow cover across the Arctic regions of North America and Eurasia each June has halved compared with observations before 2000, the report finds.

ARCTIC WARMING

Air-temperature data from 2000 to 2014 show that much of the Arctic is now 3 °C warmer as compared to the 1971–2000 baseline.

Air-temperature anomaly (°C)



SOURCE: SNOW, WATER, ICE, AND PERMAFROST IN THE ARCTIC