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Flavour profiles

Each image shows a false-colour map of astronomical data, revealing the structure of the Universe in unique ways. Here, the Large Magellanic Cloud, a satellite galaxy of the Milky Way, is shown in infrared light. Astronomers are using machine learning to classify the objects in such images. See Editorial and News Feature.

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Good recycling starts at home — and boosts the bottom line

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Recycling is a key part of the transition to a circular economy. But how can companies make it more accessible to consumers? Innovative approaches to battery recycling are showing the way.
Nick Cohen

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The Amazon can be saved — with concerted action inside and outside Brazil

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10 Jun 2026
As deforestation in the Amazon falls, Nature argues that the rainforest can still be protected and restored, but only if there is a worldwide effort to stop cutting it down.

World View

Can G-scientists towards AI is a wake-up call — universities must take it seriously

World View
10 Jun 2026
The challenge for universities is not adopting artificial intelligence, but doing so in a way that meets the current generation of students can trust.
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Don't compete: collaborate; why collective funding applications are the future

World View
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Scientists with disparate expertise writing grants together can see dramatically bigger gains and drive progress — but systems must change, argue Sophie Hart and Tyanshi Rahi.
Sophie Hart

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Research Highlight
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Trace fossil sets off the earliest animals seven times more than previously thought.

Device could sniff out human reactors secretly making material for a nuclear bomb

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Antineutrinos easily escape the centre of reactors and could be detected with a tiny fraction of the energy.

Robots' birth weight improves with bulge of pavements to parents

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Improvements to the construction of robots can help to reduce the number of failures or make robots.

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Large-scale measurements of atmospheric hydrofluoroolefins show that their levels are rising, but the implications are unclear.

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Scientists have long worried about the reliability of commercial antibodies, and the latest findings have spotted fresh concerns.
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Poor supervision is pushing young researchers out of academia

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A survey finds that academic supervisors can have a huge impact on their students' mental health.
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Treatments are in bulk-up fighting heads to restore their vigour — but can the field move on from past controversy?
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01 Jun 2026
Online prediction markets are taking bets on everything from climate change to quantum computing. But researchers question their accuracy.
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The tech giant says it will make 'topological' quantum computers that can be scaled up faster than competing technologies.
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An experiment with 2,295 participants backs Richard Feynman's answer to every diner's dilemma: do I want to try something else?
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Bang! Exploding immune cells catalyse potent toxins everywhere

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Generation of newly discovered "cytolytic" bacteria Tolkamia, releases compounds that kill nearby cells in minutes.
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Peptide injections are the hottest trend in wellness. Researchers say enthusiasm for these compounds may be get ahead of the science.
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How ice forms is a mystery — now scientists are cracking the case

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Researchers have made a giant leap in solving the world's most elusive scientific problem with experimental data, but studies are starting to illuminate the hidden behaviour of freezing.
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Bringing the cost of life down by recycling batteries
Save worldwide the recycling batteries for electric cars could save consumers and make EVs cheaper.

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Sustainability or dystopia? What past nations tell us about where society is heading

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A new book applies principles of environmental ageing science to past societies' transitions — and delivers a clear-eyed view about the future today.
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How AI is reshaping discovery in maths and physics

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Child sexual abuse enabled by digital technologies is widespread and under-reported

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The first comprehensive review of the global prevalence of technology-facilitated child sexual abuse and exploitation reveals a worrying picture. Urgent action is needed to protect children and young people from online harms.
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Rapid experiment ushers in next generation of neutrino experiments

News & Views
10 Jun 2026
Physicists have long sought to understand the properties of neutrinos, elusive subatomic particles that are produced in nuclear reactions and in the Sun. The first measurements from the JUNO experiment demonstrate unprecedented precision and are poised to yield exciting results.
Patricia Vahle & Zoya Vallari

Neon in an egg cell: structures of protein storage units in oocytes

News & Views
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Cryo-electron microscopy has revealed the structure of the ferritin protein complex that stores iron in human oocytes. Ferritin is also found in the brain, and the structure of the oocyte ferritin complex could help researchers to understand the role of ferritin in neurodegenerative diseases.
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Quantum light source boosts attosecond science

News & Views
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A method to trigger the emission of single photons from a nanostructured laser that has a higher intensity.
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A treasure trove of Neolithic sea kayaks

News & Views
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Archaeological finds in Norway, Ireland and Denmark have revealed that ancient Europeans were skilled seafarers who used sea kayaks to travel between islands and to hunt marine mammals.
Michael P. H. Stumpf & Ed Lasher

Analysis

Building sand drives climate adaptation products

Analysis
10 Jun 2026
Academic, private and public sectors must work together to expand the use of, and strengthen, co-production approaches for building sand-driven climate adaptation products.
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Measurement of reactor neutrino oscillations with the first 8 NO data

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10 Jun 2026
The first data of the reactor antineutrino flux and spectrum measurements from the JUNO experiment are presented, showing precise measurements of neutrino oscillation parameters and the neutrino mass ordering.
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Improved quantum processor logical error rates via correction and detection

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10 Jun 2026
Experimental demonstration of a quantum processor with logical qubits that can correct errors and detect a leakage error, paving the way for fault-tolerant quantum computing.
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Nonlinear atomic tunnelling boosted by bright squeezed vacuum

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Bright squeezed vacuum light boosts nonlinear atomic tunnelling ionization more than 30-fold compared with coherent light, enabling quantum control of strong-field processes at low intensities and high repetition rates.
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Cavity-driven attractive interactions in quantum materials

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Photon-mediated, cavity-driven attractive interaction is described, enabling the observation that terahertz light trapped within a cavity can mediate attractive interactions in a model and an Ising material.
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Chiral superfluorescence from perovskite superlattices at room temperature

Article
10 Jun 2026
Chiral superfluorescence is observed in perovskite superlattices at room temperature, where coherent and cooperative correlations between quantum-confined emitters can be engineered.
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In-situ nanocrystal confinement for efficient blue perovskite LEDs

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Efficient blue perovskite light-emitting diodes with an external quantum efficiency of 29.3% are achieved through in situ polymerization-driven nanocrystal confinement.
Chenchang Hu, Min Yu, …Xueqing Zhou

Analysis of trade-offs of post-sorting plastic packaging

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Post-sorting plastic packaging waste can be recycled mechanically or chemically, but which recovery route is better and post-sorting pathways? Life cycle assessment and techno-economic analysis are combined to find the optimal solutions for a variety of plastic packaging waste streams.
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Temporary carbon dioxide removal to offset short-lived climate forcers

Article
27 Apr 2026
Temporary carbon dioxide removal can offset short-lived forcers (SLFs), providing a flexible climate mitigation approach for cooling temporary carbon dioxide removal activities in response to short-term SLF emissions, according to a climate–carbon model.
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Decade-long warming accelerates antibiotic resistance in grassland soils

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Long-term warming of grassland soils for more than a decade has a direct effect, enriching resistance to class-and-gene transfer, driven by selection for thermal tolerance and horizontal gene transfer, with implications for public health.
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Technology mediation in child sexual exploitation and abuse in SEA and Asia

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Building on findings from 25 countries, this study analyses technology-facilitated child sexual exploitation and abuse in Southeast and East Asia, with implications for public health.
Sakshi Ghai, Nishi Kumar, …Amy Orben

Ancient DNA reveals pervasive directional selection across West Eurasia

Article
15 Apr 2026
Analysis of 1,016 ancient West Eurasian genomes, spanning 14,000 years of directional selection, showing that polygenic adaptation was widespread, rather than being rare over this period as previously assumed.
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Saturation editing of DNMT3A R-mutants distinct dominant and recessive disorders

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Saturation genome editing of DNMT3A identifies the functional and clinical impact of variants across the entire gene and delineates variants that cause a new dominant disorder from those that cause recessive disease.
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Dynamics of genomic and somatic trade-offs in ageing and mortality

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Mapping DNA variants that modulate mortality using a sibling population of 4,439 young mice defined 25 distinct loci that influence lifespan and mortality with divergent age- and sex-specific effects, as well as 19 loci that directly modify body mass with mortality impacts.
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Shared neural substrates of prosocial and parenting behaviours

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Prosocial behaviour and parenting behaviour are distinct but share neural substrates in the medial preoptic area, suggesting that parenting may have evolved by co-opting existing prosocial circuits.
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Dopamine drives persistent remodelling of the maternal brain

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Brain-wide transcriptomic profiling in mice reveals that reproductive experience remodels the maternal brain by altering dopamine dynamics in the dorsal striatum and ventromedial hypothalamus, driving maternal memory and motivational modifications and thereby changes in gene and behaviour.
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Acute cardiogenic bacterial toxin binds claudin-5 to cleave E-cadherin

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CDH5PR-secreting strains that claudin-5 is a receptor for the pro-carcinogenic E. faecalis toxin on colorectal epithelial cells, and that this interaction promotes cleavage of E-cadherin, leading to epithelial disruption and inflammation.
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Pervasive and programmed nucleosome distortion on single chromatin fibres

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Single-molecule footprinting reveals that nucleosomes are pervasively distorted in a range of nucleosome types and shows that most nucleosomes exhibit a programmed distortion in which the DNA wraps tightly around an octamer.
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Structure of the mouse cytoplasmic lattice

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Using high-resolution cryo-electron microscopy of the mouse oocyte, the cytoplasmic lattice—which is required for oocyte maturation and where oocytes store proteins for early development—is resolved.
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Molecular basis of oocyte cytoplasmic lattice assembly

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Structural studies using cryo-electron microscopy reveal the molecular basis and architecture of the mouse oocyte cytoplasmic lattice, and provide a molecular basis for understanding its functions in embryogenesis.
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Cryodynamic lattices are exquisitely responsive complexes in mammalian oocytes

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Structural studies of cubic mouse oocyte cytoplasmic lattices using cryo-electron microscopy reveal that they consist of MSY4- and subcortical maternal complex protein-containing assemblies and are exquisitely responsive to physiological cues.
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Structural basis of Sarm1 δ-2 ribose-cyclase inhibition by cryptophycin

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Cryptophycin-52 is a potent inhibitor of the NAD$^+$ hydrolase Sarm1, providing a structural basis for the development of next-generation therapeutics for neurodegenerative diseases.
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