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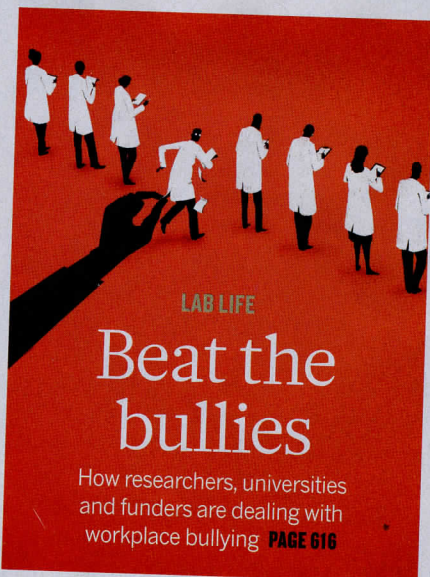
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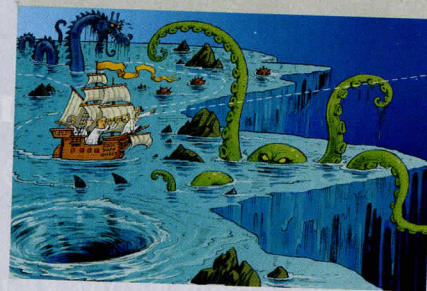
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A spotlight on bacterial mutations for 75 years

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Similar levels of injury found in ancient Neanderthal and human skulls

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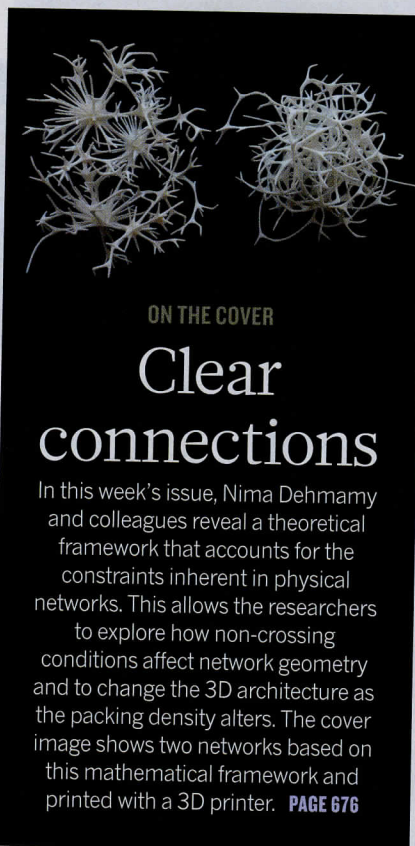
Predictable and precise template-free CRISPR editing of pathogenic variants

M W Shen et al.

652 PLANT SCIENCES

Structural plasticity of D3–D14 ubiquitin ligase in strigolactone signalling

N Shabek et al.



ON THE COVER

Clear connections

In this week's issue, Nima Dehmamy and colleagues reveal a theoretical framework that accounts for the constraints inherent in physical networks. This allows the researchers to explore how non-crossing conditions affect network geometry and to change the 3D architecture as the packing density alters. The cover image shows two networks based on this mathematical framework and printed with a 3D printer. [PAGE 676](#)

LETTERS

657 **ASTROPHYSICS** Spatially resolved rotation of the broad-line region of a quasar at sub-parsec scale
GRAVITY Collaboration [SEE N&V P.636](#)

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K J Satzinger et al.

666 **QUANTUM PHYSICS** Creation and control of multi-phonon Fock states in a bulk acoustic-wave resonator
Y Chu et al.

671 **QUANTUM OPTICS** Superfluorescence from lead halide perovskite quantum dot superlattices
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676 **COMPLEX NETWORKS** A structural transition in physical networks
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686 **PALAEOANTHROPOLOGY** Similar cranial trauma prevalence among Neanderthals and Upper Palaeolithic modern humans

J Beier, N Anthes, J Wahl & K Harvati

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691 **DEVELOPMENTAL BIOLOGY**

Trans-differentiation of outer hair cells into inner hair cells in the absence of *INSM1*

T Wiwatpanit et al.

696 **DEVELOPMENTAL BIOLOGY** Helios is a key transcriptional regulator of outer hair-cell maturation

L Chessum et al.

701 **STEM-CELL RESEARCH** Linking a cell-division gene and a suicide gene to define and improve cell therapy safety
Q Liang et al.

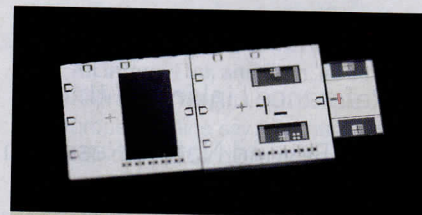
705 **MICROBIOLOGY** Methicillin-resistant *Staphylococcus aureus* alters cell wall glycosylation to evade immunity

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710 **ECOLOGICAL EPIDEMIOLOGY** Cryptic connections illuminate pathogen transmission within community networks
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714 **IMMUNOLOGY** Efferocytosis induces a novel SLC program to promote glucose uptake and lactate release
S Morioka et al.

719 **CANCER** Mannose impairs tumour growth and enhances chemotherapy
P S Gonzalez et al.



QUANTUM PHYSICS

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COVER IMAGE: A.-L. BARABÁSI, N. DEHMAMY & A. GRISHCHENKO

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Digital revolution

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S132 ECONOMICS

Automatic pilots

Automation is set to change your job, not take it away

S136 PUBLIC SERVICES

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Electronic government brings benefits but also poses security risks

S138 PSYCHOLOGY

Keeping our heads

Is using digital devices to excess damaging mental health?

S141 AUTOMATION

Meeting people's expectations

Facing up to fear of artificial intelligence



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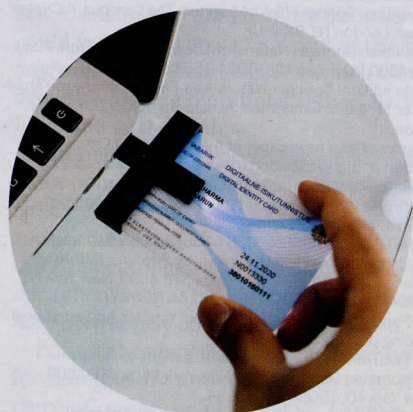
Saving for the future

Ways to maintain the historical record when information is only available online

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An Internet for, and from, us all

Represent marginalized people properly online, say Anasuya Sengupta, Siko Bouterse and Kira Allmann




**MORE
ONLINE**

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- To read about how technology can help to forecast moods, visit: go.nature.com/2dptjda
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