



## COVER

Individuals with autism, a neurodevelopmental disorder, show impairment in social communication and language. Genetic analysis of closely related people reveals clues to the neural deficits that may underlie the disorder. See page 218.

*Image: Kenneth Xavier/Xavier Studio*

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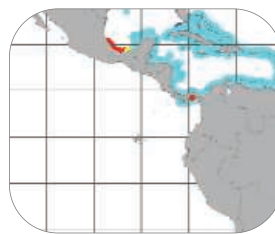
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## SCIENCE EXPRESS

[www.sciencexpress.org](http://www.sciencexpress.org)

### PHYSICS

#### Suppressing Spin Qubit Dephasing by Nuclear State Preparation

*D. J. Reilly et al.*

A series of voltage pulses can mitigate the detrimental influence of background spins in gallium arsenide, allowing the spin of quantum dots to remain coherent for microseconds.

10.1126/science.1159221

### IMMUNOLOGY

#### Regulation of CD45 Alternative Splicing by Heterogeneous Ribonucleoprotein, HnRNPLL

*S. Oberdoerffer et al.*

A ribonucleoprotein directs the splicing of the transcript for CD45, a transmembrane tyrosine phosphatase that initiates signaling through antigen receptors.

10.1126/science.1157610

### ECOLOGY

#### One-Third of Reef-Building Corals Face Elevated Extinction Risk from Climate Change and Local Impacts

*K. E. Carpenter et al.*

The viability of the world's major coral reefs is endangered both by direct human disturbance and by disease and bleaching events brought on by climate change.

10.1126/science.1159196

### PHYSICS

#### Quantum Gas of Deeply Bound Ground State Molecules

*J. G. Danzl et al.*

A coherent Raman pumping scheme cools cesium molecules to a state with minimal rotational energy, needed for producing cold molecular Bose-Einstein condensates.

10.1126/science.1159909

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[full text at www.sciencemag.org/cgi/content/full/321/5886/200a](http://www.sciencemag.org/cgi/content/full/321/5886/200a)

#### Response to Comment on "Genetically Determined Differences in Learning from Errors"

*T. A. Klein et al.*

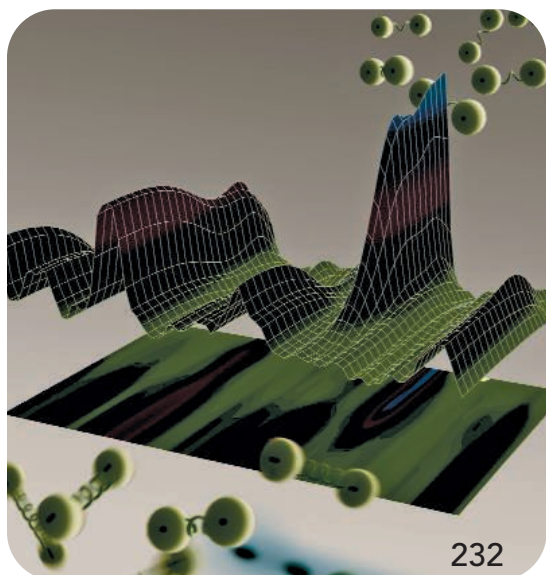
[full text at www.sciencemag.org/cgi/content/full/321/5886/200b](http://www.sciencemag.org/cgi/content/full/321/5886/200b)

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#### Source Analysis of the Crandall Canyon, Utah, Mine Collapse 217

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The anomalous seismic event in Utah on 6 August 2007 was produced by the collapse of a mine chamber 1 kilometer beneath the surface, which induced faulting of rocks above it.

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#### Identifying Autism Loci and Genes by Tracing Recent Shared Ancestry 218

*E. M. Morrow et al.*

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>> *Perspective p. 208; Science Podcast*

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Juxtaposition Within the Rodinia Supercontinent

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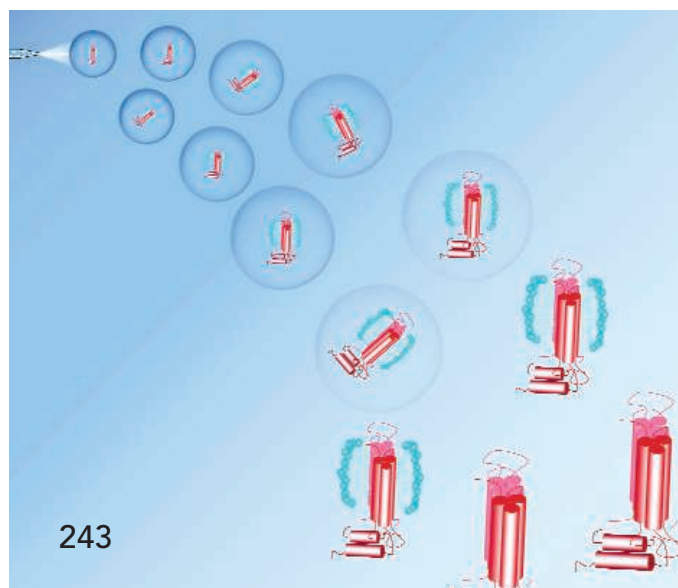
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Far out.

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HIGHLIGHTS FROM OUR DAILY NEWS COVERAGE

### A Very Memorable Trip

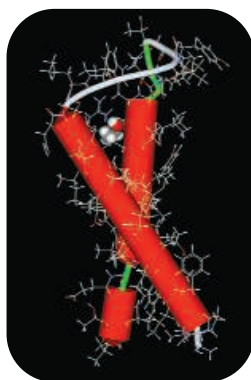
Volunteers find long-lasting personal and spiritual meaning in a hallucinogenic drug.

### Rain on the Martian Plain?

A new soil analysis suggests a drizzly past for the Red Planet.

### Eyeless Worm Senses Light

Discovery of light-responsive neurons in a nematode may hold clues about eye evolution.



Ethanol stabilization of protein substate.

## SCIENCE SIGNALING

[www.sciencesignaling.org](http://www.sciencesignaling.org)

THE SIGNAL TRANSDUCTION KNOWLEDGE ENVIRONMENT

### REVIEW: Ethanol's Molecular Targets

*R. A. Harris, J. R. Trudell, S. J. Mihic*

Ethanol affects the functions of specific proteins through its interaction with a select few amino acids in those proteins.

### PODCAST

*J. F. Foley and A. M. VanHook*

Inhibition of NF- $\kappa$ B activation in macrophages results in a proinflammatory outcome.



Controversial science.

## SCIENCE CAREERS

[www.sciencereers.org/career\\_development](http://www.sciencereers.org/career_development)

FREE CAREER RESOURCES FOR SCIENTISTS

### Courting Controversy: Out of the Mainstream

*J. Bohannon*

Sims Bainbridge is a sociologist who does not shy away from controversial topics.

### Courting Controversy: Animal Rights (and Wrongs)

*S. Webb*

Working with lab animals can be a source of public antagonism and private ambivalence.

### A New Astrophysics Editor at *Science*

*E. Pain*

Maria Cruz has a rich background that goes well beyond research.

### An Online Poll for Students and Postdocs

*Science Careers Staff*

How do you feel about your long-term professional prospects?

## SCIENCE PODCAST

[www.sciencemag.org/multimedia/podcast](http://www.sciencemag.org/multimedia/podcast)

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