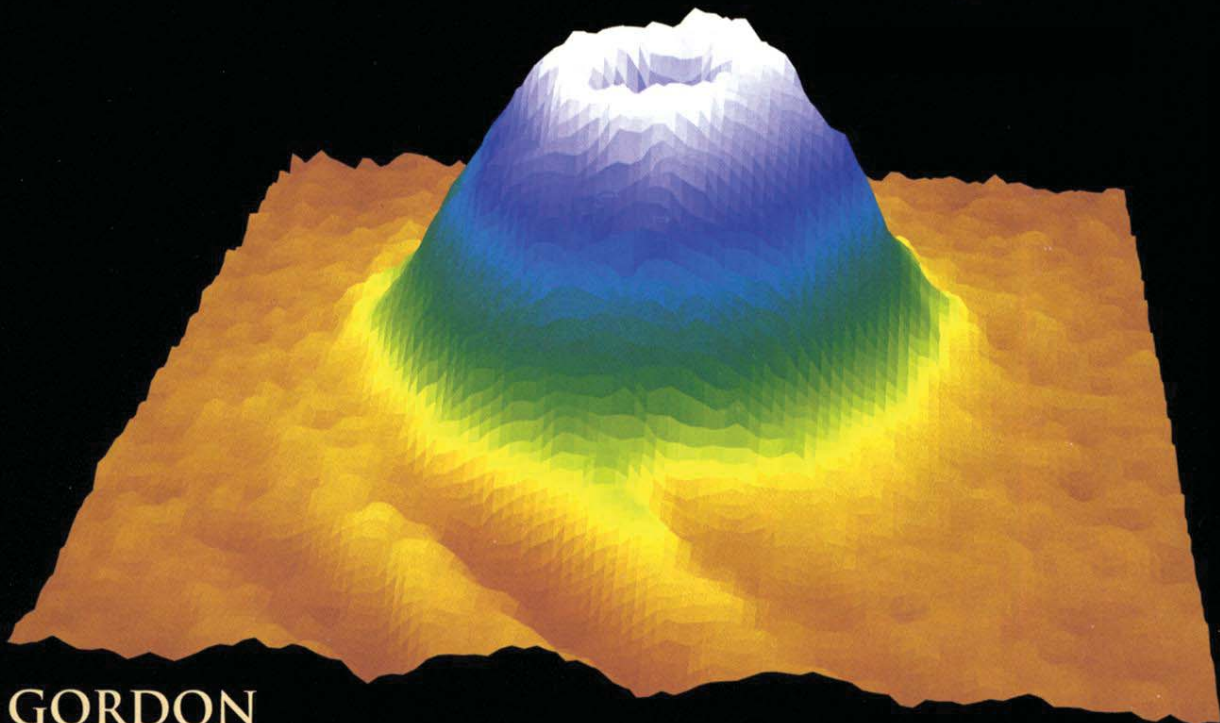


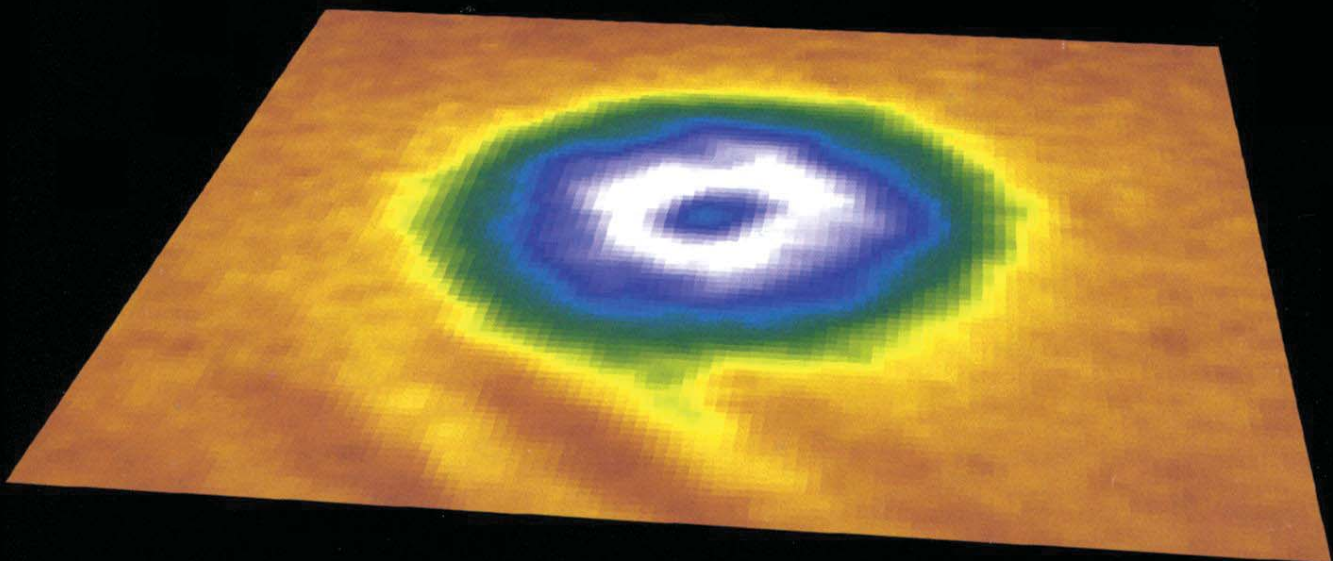
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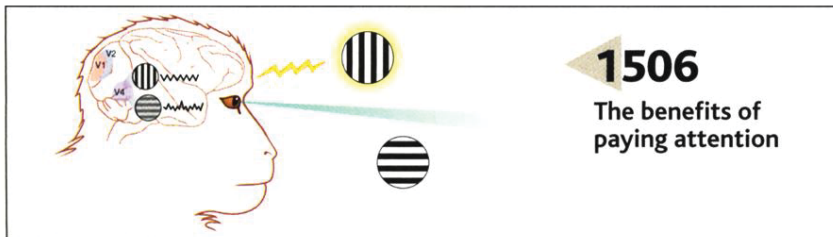
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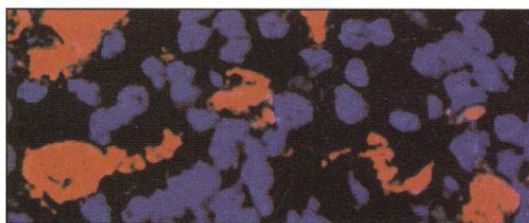
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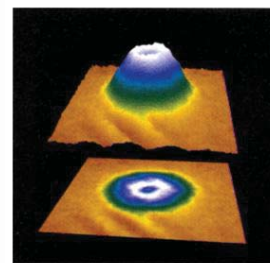
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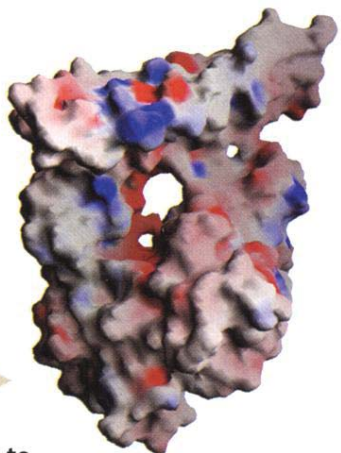
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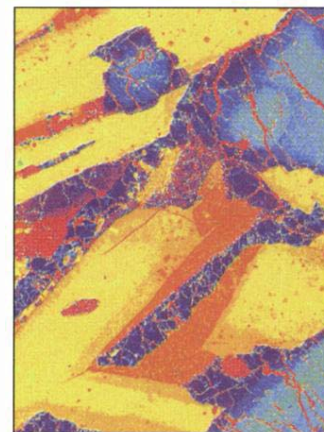
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When rotated above a critical frequency, a single quantum of circulation, known as a vortex, forms in a gaseous Bose-Einstein condensate, marking the breakdown of superfluidity in a quantum fluid. The vortex core appears in this absorption image of the rubidium atom cloud as a hole in the density profile. The Gordon Research Conference on Atomic Physics will meet at Williams College on 17 to 22 June. The summer and international conference schedules begin on p. 1569. [Image: Kirk W. Madison, Frédéric Chevy, Jean Dalibard/Laboratoire Kastler Brossel, École Normale Supérieure, Paris]



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How rusty is the
Red Planet?



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Turing-Type Patterns on Electrode Surfaces Y.-J. Li, J. Oslonovitch, N. Mazouz, F. Plenge, K. Krischer, G. Ertl

Analogs of Turing patterns turn up at the surfaces of gold electrodes and may be observable in many electrochemical systems.

Length of the Flagellar Hook and the Capacity of the Type III Export Apparatus S. Makishima, K. Komoriya, S. Yamaguchi, S.-I. Aizawa

The export apparatus apparently acts as a kind of "measuring cup" to define the remarkably uniform size of the hook structure at the base of the bacterial flagellum.

TECHNICAL COMMENTS

Polyploidy and Gender Dimorphism

In a study of the North American plant genus *Lycium*, Miller and Venable (Reports, 29 Sep. 2000, p. 2335) proposed that polyploidy may trigger gender dimorphism "by disrupting self-incompatibility and leading to inbreeding depression." Brunet and Liston argue that the analysis by Miller and Venable "does not support the claimed associations," suggest possible shortfalls in their method for measuring self-compatibility, and hold that showing the importance of the claimed associations in the evolution of gender dimorphism requires a demonstration "that gender dimorphism arises more frequently via this pathway than via other pathways." Miller and Venable cite additional phylogenetic work supporting their analysis and suggest some additional statistical tests for the notion of polyploidy as a trigger for gender dimorphism.

The full text of these comments can be seen at www.sciencemag.org/cgi/content/full/291/5508/1441a

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Protocol: Immunoisolation of TCR Signaling Complexes from Jurkat T Leukemic Cells T. Harder and M. Kuhn

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In this week's installment in our occasional consultancy series, Clare Sansom explains why having several strings to her bow is the key to a successful freelance career.

Germany: Establishing a Genome Research Network R. Metzke

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AD SUPPLEMENT / 16 MARCH ISSUE

Technologies in Cancer Research:

This ad supplement is focused on technologies used in the fields of biochemical pathways and how these pathways control cell division and cell death (apoptosis). Look for it in the 16 March issue.

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