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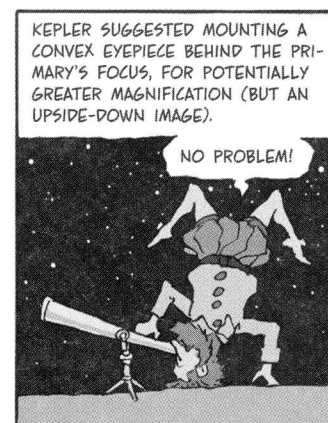
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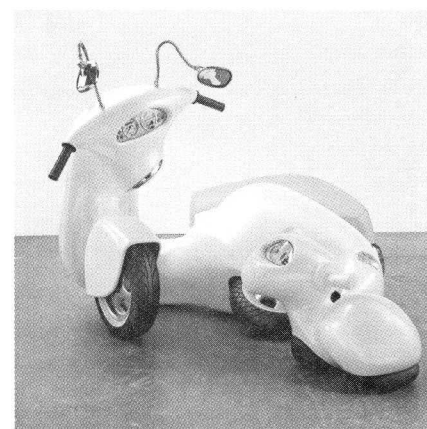
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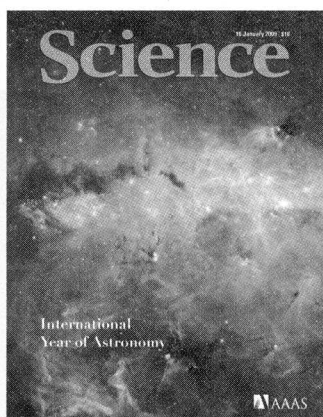
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COVER

Hot dust clouds in the center of the Milky Way, photographed by the Infrared Array Camera (IRAC) aboard the Spitzer Space Telescope. The International Year of Astronomy gets under way this week with opening ceremonies at UNESCO headquarters in Paris; *Science* marks the occasion with a special News Focus section beginning on page 326.

Image: NASA/JPL-Caltech/S. Stolovy (Spitzer Science Center/Caltech)

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G. C. Sloan et al.

A carbon star lacking many heavy elements produces abundant dust, perhaps explaining the origin of dust in the early universe.

356 Early Lunar Magnetism

I. Garrick-Bethell et al.

Remnant magnetism in minerals in an unshocked Apollo sample implies that the Moon had a molten core 4.2 billion years ago.

359 Contribution of Fish to the Marine Inorganic Carbon Cycle

R. W. Wilson et al.

Fish excrete large amounts of calcium carbonate and thus influence the carbon cycle in the ocean.

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362 Morphogenesis of Self-Assembled Nanocrystalline Materials of Barium Carbonate and Silica

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The growth of inorganic crystals in a chemically coupled system produces curved morphologies like those found in biology.

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An automated design process arranges thousands of metamaterial components to cloak an object on a metal surface.

369 Coherent Intrachain Energy Migration in a Conjugated Polymer at Room Temperature

E. Collini and G. D. Scholes

Extended conformations of polymers in solution foster rapid energy transport along individual chains, but not between chains.

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373 A Mouse Speciation Gene Encodes a Meiotic Histone H3 Methyltransferase

O. Mihola et al.

A gene responsible for sterility in the offspring of two mouse species, and therefore important in speciation, regulates gene expression via methylation in chromatin.

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376 A Single Gene Causes Both Male Sterility and Segregation Distortion in *Drosophila* Hybrids

N. Phadnis and H. A. Orr

A *Drosophila* gene that causes sterility in the offspring of two species and may be important for speciation causes increased transmission of itself to progeny.

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A protein cue guides the formation of bundles of nerve fibers that connect the cerebral hemispheres.

393 Recombination of Retrotransposon and Exogenous RNA Virus Results in Nonretroviral cDNA Integration

M. B. Geuking et al.

With the help of an endogenous retrovirus, RNA virus sequence can be incorporated into mouse chromosomes.

396 Molecular Mechanisms of HipA-Mediated Multidrug Tolerance and Its Neutralization by HipB

M. A. Schumacher et al.

A persistence factor similar to a eukaryotic kinase regulates bacterial dormancy and contributes to antibiotic resistance in *E. coli*.

401 Chromatin-Associated Periodicity in Genetic Variation Downstream of Transcriptional Start Sites

S. Sasaki et al.

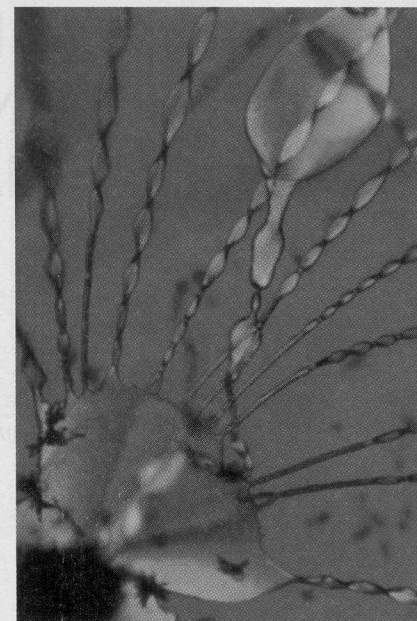
The periodic wrapping of DNA around nucleosomes in chromatin determines a periodic variation in mutation type and frequency around transcription start sites in a fish.

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