

Cover figure: The curve traced out by the expectation value of the (vector) quantum spin operator as a function of time in a magnetic resonance experiment. Instead of precessing around a static magnetic field, the spin vector "precesses" around a continually changing magnetic field, resulting in the spiral path shown. See the article on page 1051 for more detail.

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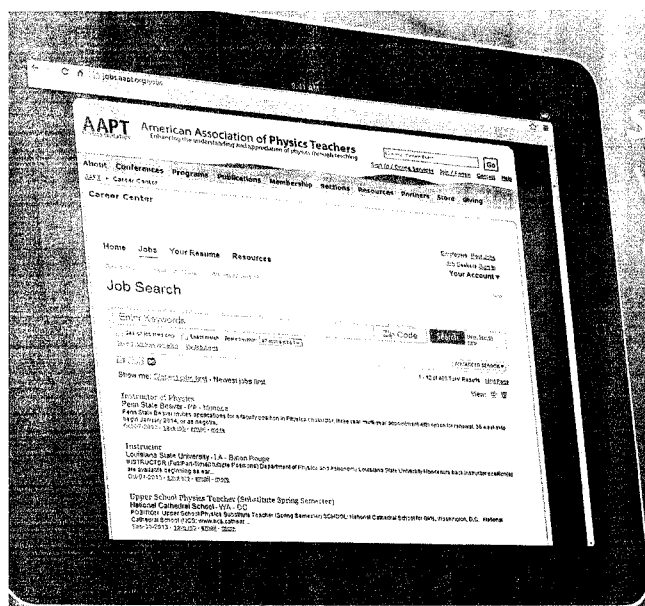
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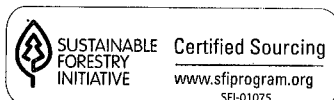
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Cover: The sea lampreys (*Petromyzon marinus*) pictured here are primitive jawless vertebrates that have invaded the US Great Lakes and greatly reduced native fish populations. Lampreys are able to attach to other fish by using their suction mouth and keratinized teeth. They then rasp a hole into their prey, through which fluids are extracted. Efforts to control this pest species are beginning to take advantage of genetic and genomic techniques that have recently become available with sequencing of the sea lamprey genome, as is described in an article in this issue by David W. McCauley and his colleagues. A cross-disciplinary molecular genetic approach to understanding lamprey biology will be important both for developing strategies to manage this invasive species, as well as for understanding vertebrate evolution. Photograph: Ted Lawrence, Great Lakes Fishery Commission.

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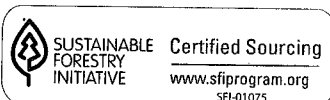
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Wash me thoroughly from my iniquity

Mary Mathew



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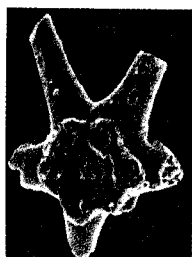
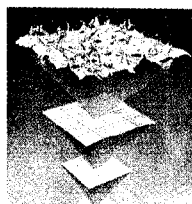
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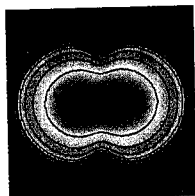
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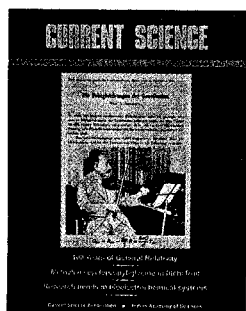
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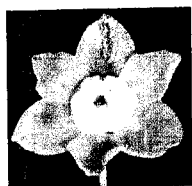
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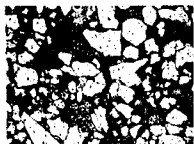
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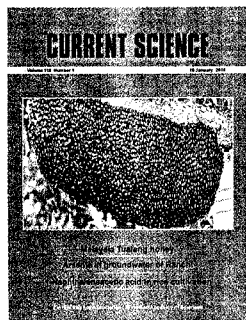
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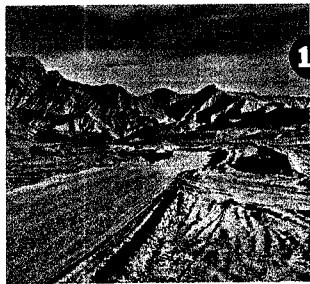
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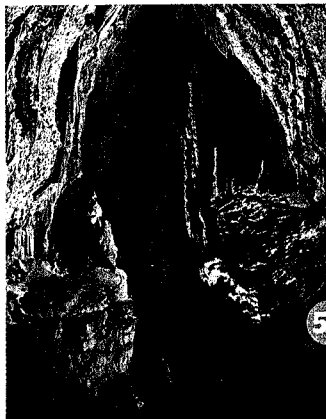
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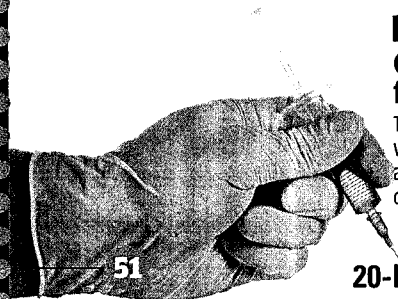
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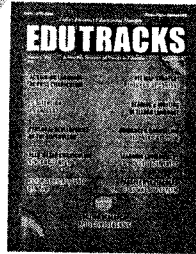
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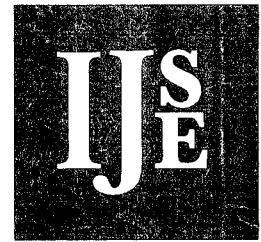
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