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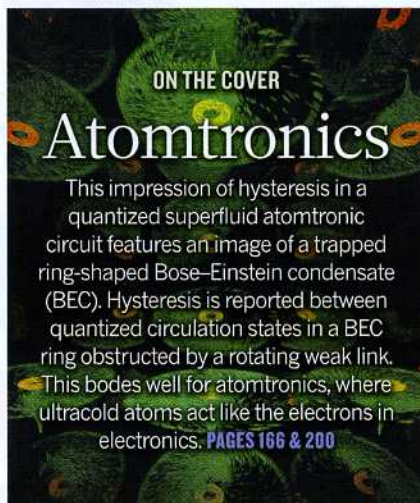
Detailed studies of mesoscale ocean



ECOLOGY

Green down

Models suggest the Amazon 'green up' was a trick of the light. **PAGE 221**



ON THE COVER

Atomtronics

This impression of hysteresis in a quantized superfluid atomtronic circuit features an image of a trapped ring-shaped Bose-Einstein condensate (BEC). Hysteresis is reported between quantized circulation states in a BEC ring obstructed by a rotating weak link. This bodes well for atomtronics, where ultracold atoms act like the electrons in electronics. **PAGES 166 & 200**

eddies off the coast of Peru
Amala Mahadevan

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A Pontzen & F Governato

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in a quantized superfluid 'atomtronic' circuit

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212 CLIMATE SCIENCE A two-fold increase of carbon cycle sensitivity to tropical temperature variations

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216 CONSERVATION Global conservation outcomes depend on marine protected areas with five key features

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221 ECOLOGY Amazon forests maintain consistent canopy structure and greenness during the dry season

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240 CANCER Leukaemogenesis induced by an activating β -catenin mutation in osteoblasts

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254 CORRIGENDUM The architecture of *Tetrahymena* telomerase holoenzyme

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