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Change Shape

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An Off Switch
for Cancer

NEUROSCIENCE

How to Reach
"Vegetative" Patients

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IF SUPERSYMMETRY

CRISIS

DOESN'T PAN OUT,

IN

SCIENTISTS NEED A NEW WAY

PHYSICS

TO EXPLAIN THE UNIVERSE

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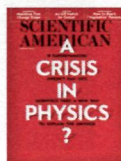


MAY 2014

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ON THE COVER



The Higgs boson was just the beginning. Scientists at CERN's Large Hadron Collider also desperately want to find evidence of supersymmetry, a theory of matter that posits the existence of a brand-new world of fundamental particles. To the surprise of many, no signs have yet been found. When the LHC starts up early next year, the stakes will be high: find supersymmetry, or face a crisis in physics.



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For decades physicists have been working on a beautiful theory that would lead them to a deeper understanding of the quantum world. But soon they will face a moment of truth, when their theory is either proved or found to be lacking.

By Joseph Lykken and Maria Spiropulu

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By releasing the brakes that tumor cells place on the immune system, researchers are developing a new generation of more powerful treatments against malignancy. *By Jedd D. Wolchok*

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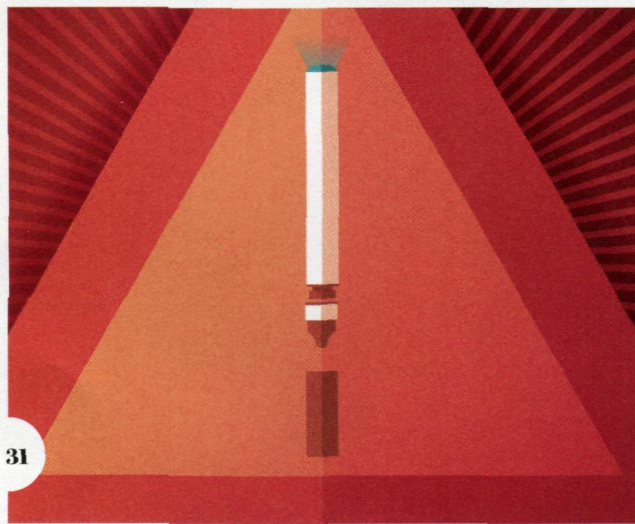
Tick- and mosquito-borne diseases go farther afield. *By Mark Fischetti*

ON THE WEB

The Future of the Internet

This year marks the 25th anniversary of the invention of the World Wide Web. Where will the Internet go from here, especially considering the challenges to net neutrality?

Go to www.ScientificAmerican.com/may2014/internet



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