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# RINGS OF FIRE

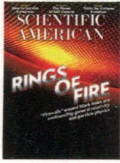
“Firewalls” around black holes are  
confounding general relativity  
and particle physics

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The event horizon of a black hole—the point of no return—was once thought to be an unremarkable area of space. New considerations based on string theory, however, suggest this border is actually a wall of high-energy particles that would destroy any object that tried to pass through. These “firewalls” may even represent the end of spacetime altogether. Image by Kenn Brown, Mondolithic Studios.

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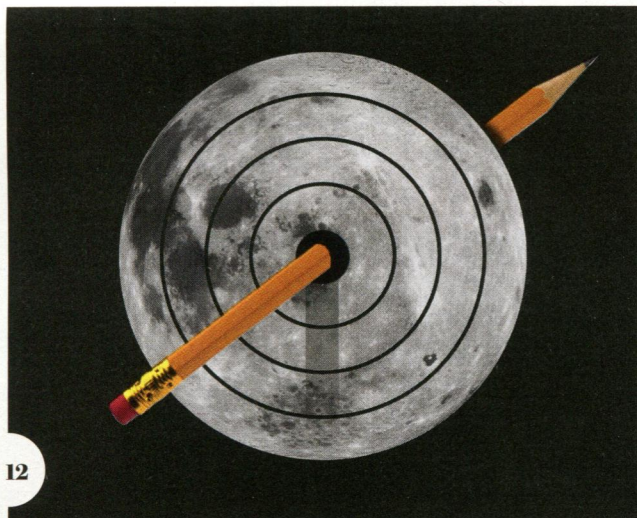
A genomic tree for bird lineages hatches some surprises. *By Sarah Lewin*

## ON THE WEB

### Dawn Arrives at Ceres

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Go to [www.ScientificAmerican.com/apr2015/dawn](http://www.ScientificAmerican.com/apr2015/dawn)



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