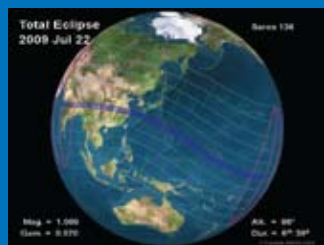


## Highlights from our blog

### Fermi telescope captures a solar eclipse

July 24, 2009



The Fermi Gamma-ray Space Telescope was launched to study gamma rays, not sunshine. Yet that's what it has done, most recently last week, when one of its instruments registered signals from a solar eclipse.

### A helium atom walks into a bar...

July 21, 2009



Brian Malow is living proof that a science comedian can actually invoke laughs from his audience instead of groans. While researching a feature for the current issue of *symmetry* on the limited supply of helium on Earth and how a helium shortage would affect high-energy physics, I came across a five-minute talk Malow gave on the subject.

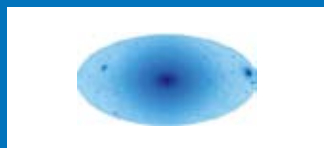
### LHC update

July 20, 2009

In the latest issue of the *CERN Bulletin*, the laboratory reports that vacuum leaks have been found in two "cold" sectors of the Large Hadron Collider. Repairing the leaks will require the affected part of each sector to be warmed to room temperature, but will not affect the vacuum in the beam pipe. The repairs will push the collider's restart date to mid-November.

### Dark matter may be brighter than expected

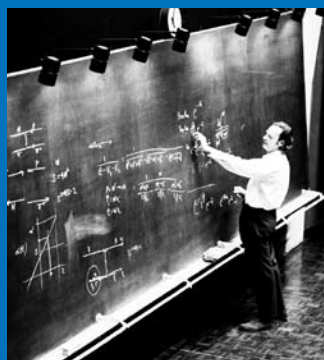
July 17, 2009



The Fermi Gamma-ray Space Telescope may find dark matter in our galaxy more easily than expected. Theoreticians have demonstrated that small clumps of dark matter in our galaxy and others like it may be more visible than previously thought.

### Feynman "Messenger" lectures now available online

July 15, 2009



A set of seven talks by legendary, Nobel-winning physicist Richard Feynman is now available online, free of charge and through a much more versatile application than YouTube.

### Physicists on a plane

July 14, 2009

To some people, physicists are even scarier than snakes on a plane. A piece in yesterday's *New York Times* with Michael Tuts, experimental particle physicist at Columbia University and frequent traveler to CERN, discusses how his seatmates react to him being a physicist.

### Another cosmic-ray puzzle: Are iron nuclei bombarding Earth?

July 13, 2009



For decades, scientists have thought that the highest-energy cosmic rays—those packing up to a million trillion electronvolts—were almost exclusively protons. But data from the Pierre Auger Observatory in Argentina may tell a startlingly different story.

### Wood from NOvA site fuels renewable energy in Minnesota

July 10, 2009

Rather than wasting wood cleared from the detector construction site, a logging company will sell it to two Minnesota power plants.

### BaBar's hunt for an exotic Higgs particle

July 7, 2009

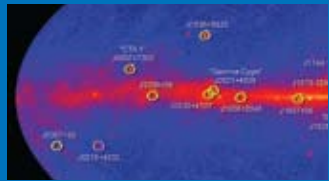


The BaBar collaboration submitted two papers to *Physical Review Letters* last month, both searching for hypothetical light-mass Higgs bosons, the particles suspected of giving objects their mass. Neither found evidence of a low-mass Higgs in the BaBar data set.

Read the full text of these stories and more at [www.symmetrymagazine.org/breaking](http://www.symmetrymagazine.org/breaking)

## “Beyond our wildest dreams:” Fermi scope bags 16 gamma-ray-only pulsars

July 6, 2009



After only one year of operation, the Fermi Gamma-ray Space Telescope has already outperformed researchers' best expectations. In two papers, researchers reported a new class of pulsar and evidence that helps explain how gamma-ray emission occurs.

## World Science Festival: Time since Einstein

July 1, 2009



“Time, I think, is a little bit like love,” began moderator John Hockenberry. “It’s accessible to all of us; it is intuitively experienced by all of us in the same way; yet it retains its mystery at whatever level you weigh in on it.”

## Researchers find evidence for the origin of cosmic rays

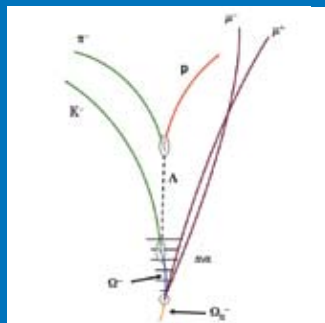
June 30, 2009



An international team of researchers has discovered strong evidence that extremely energetic cosmic rays are born in supernova remnants.

## Fermilab’s CDF observes Omega-sub-b baryon

June 29, 2009



The discovery of this “doubly strange” particle, predicted by the Standard Model, is significant because it strengthens physicists’ confidence in their understanding of how quarks form matter—and because it conflicts with a 2008 result announced by CDF’s sister experiment, DZero.

## A Higgs boson without the mess

June 26, 2009



Physicists at CERN’s Large Hadron Collider hope to discover the Higgs boson amid the froth of particles born from proton-proton collisions. Results from an experiment at Fermilab show there may be a way to cut through some of that froth.

## Steven Chu’s energy challenge

June 26, 2009

Speaking at SLAC, Secretary of Energy Steven Chu said, “For the first time in history, science has shown humans altering the destiny of our planet in a meaningful way. We have to try to enlist some of the very best intellectual horsepower to deal with this.”

## Dancing with science, or, a little light music

June 25, 2009



Before the official speeches began at the National Synchrotron Light Source II start-of-construction celebration, a lone dancer in fluorescent green commanded the attention of the audience with tribal stomps and dramatic leaps, performing a contemporary dance piece titled “Time and Space for Celebration.”

## New ways to power particle accelerators

June 16, 2009



Yesterday, a team of SLAC physicists and engineers put the final touches on a revolutionary new power source, the Marx modulator, and threw the switch. This milestone launches the final step in proving the reliability of a device poised to transform the way particle accelerators are powered.