

Calendar

[Have a safe day!](#)

Tuesday, June 8
12 p.m.

[Summer Lecture Series](#) - One
West

Speaker: Amitoj Singh,
Fermilab

Title: High Performance
Computing at Fermilab
2:30 p.m.

[Theoretical Physics Seminar](#)

(NOTE DATE) - Curia II

Speaker: Satya Nandi,
Oklahoma State University
Title: Fermion Mass Hierarchy
and New Physics at the TeV
Scale
3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over
4 p.m.

[Accelerator Physics and
Technology Seminar](#) - One
West

Speaker: Laura Loiacono,
University of Texas, Austin
Title: Flux from Neutrino Beams

Wednesday, June 9

3:30 p.m.
DIRECTOR'S COFFEE BREAK
4 p.m.

[Fermilab Colloquium](#) - One

West
Speaker: Luigi Zingales,
University of Chicago
Title: Curbing Risk on Wall
Street

[Click here](#) for NALCAL,
a weekly calendar with
links to additional
information.

[Upcoming conferences](#)

Campaigns

Feature

Energy Frontier scientists discuss future of field



[CMS Collaboration
Board Chair Dan
Green spoke about
the CMS
experiment at
Fermilab's Annual
Users' Meeting on
June 3.](#)

Currently, the Tevatron continues to dominate high-energy physics conferences, producing about 100 results each year. CDF and DZero promise exciting physics searches beyond the Standard Model.

"Eventually, the LHC will pass us by, but in the meantime there is data," said Carlos Wagner of the University of Chicago and Argonne National Laboratory. This data keeps the Tevatron in the race for searches for yet-undiscovered particles, such as the Higgs Boson.

The LHC meanwhile has been colliding protons at 7 TeV since the end of March and will continue running at this energy until a 2012 shutdown. The shutdown will allow scientists to prepare for higher energies.

"The Tevatron is already setting a very high bar, which is what's pushing us to reach that one inverse femtobarn [of data] by the end of 2011," said CERN scientist Massimiliano Ferro-Luzzi during his LHC presentation.

The LHC's CMS experiment, in which Fermilab is heavily involved, has been using the first physics data

Through accelerators such as the Tevatron and Large Hadron Collider, Fermilab continues to be a leader of the Energy Frontier. Scientists met at the annual Users' Meeting last week to discuss the status of this frontier and the field's future.

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[Carlos Wagner, a
theoretical physicist
at University of
Chicago and
Argonne National
Laboratory, spoke
about the Energy
Frontier at the
annual Users'
Meeting.](#)

Director's Corner

The public and science



[Fermilab Director Pier Oddone gave Department of Energy Under Secretary for Science Steve Koonin a tour of the laboratory on June 1.](#)

The Annual Users' Meeting was by all accounts a very successful event. Results, prizes and discussion about future plans were all part of the mix. Talks by Under Secretary for Science Steve Koonin, Associate Director for High Energy Physics Dennis Kovar and Congressman Bill Foster added an important Washington perspective. The public lecture by Under Secretary Koonin on the evening of June 2 was well attended by the public with some 700 participants from the surrounding community and schools.

Under Secretary Koonin was very gracious to stay at Fermilab longer than he had planned, and at some personal inconvenience, to give the public lecture on energy. Secretary of Energy Steven Chu, who was originally scheduled to give the lecture, had to cancel his participation because he leads a large DOE technical team that is helping BP contain the run-away oil well in the Gulf. We are very appreciative of Under Secretary Koonin's efforts and his excellent lecture, as were the many citizens who heard him. We also benefitted from his extended stay as he visited and talked with many folks at the laboratory about the scientific work we do here.

Another event that took place over the weekend was very special and encouraging. The [Chicago Council of Science and Technology](#) organized a booth on Michigan Avenue in front of the Wrigley building with a sign reading: Ask a Nobel Laureate. On a beautifully sunny Sunday afternoon, a long

[Take Five](#)[Tune IT Up](#)[H1N1 Flu](#)

For information about H1N1, visit Fermilab's flu information [site](#).

[Weather](#)

 Rain
69°/65°

[Extended Forecast](#)
[Weather at Fermilab](#)

[Current Security Status](#)[Secon Level 3](#)[Wilson Hall Cafe](#)

Tuesday, June 8
- Breakfast: Bagel sandwich
- Creamy turkey vegetable soup
- Chili dog
- Country fried steak
- Chicken cacciatore
- Italian panini w/provolone
- Assorted sliced pizza
- Super burrito

[Wilson Hall Cafe Menu](#)[Chez Leon](#)

Wednesday, June 9
Lunch
- Chipotle roasted salmon
- Pineapple cilantro rice
- Sautéed zucchini
- Coconut flan

Thursday, June 10
Dinner
- Closed

[Chez Leon Menu](#)

Call x3524 to make your reservation.

[Archives](#)

to understand the detector and rediscover the Standard Model.

Fermilab's Dan Green observed how the detector's collision data is now growing exponentially. "We are setting out into deep waters, so buckle up; it's going to be a ride," he said.

Looking forward, Fermilab is involved in LHC upgrade projects and investigating future proposed colliders such as the ILC and a Muon Collider. What the Tevatron and the LHC find in the next few years will dictate the requirements of future high-energy discovery machines. Speakers at the Users' Meeting made it clear that Fermilab is eager to take part in these discoveries.

-- *Daisy Yuhas*

[Milestone](#)

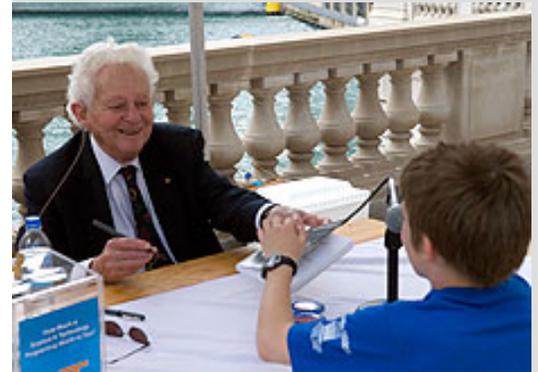
Fan Yang wins Frederick Lubkowitz Thesis Prize



CMS collaborator Fan Yang recently won the 2010 Frederick Lobkowitz Thesis Prize for his thesis titled "D Meson Hadronic Decays at CLEO-c." The prize is awarded to University of Rochester Ph.D. students graduating in experimental astroparticle, high-energy nuclear or particle physics whose accomplishments best reflect the high standards, exceptional quality and the wide range of scientific and technical research contributions of the late professor Frederick Lobkowitz.

[In Brief](#)

line of folks formed and the discussions went on for hours as our own Leon Lederman answered questions from an interested public of all ages. Leon's public service and life-long interest in reaching out to a broad public audience is an inspiration to us all.



Fermilab physicist and Nobel laureate Leon Lederman answers questions from a boy during the Ask a Nobel Laureate event in Chicago on Sunday, June 6.

[In the News](#)

Earth-shaking discovery from accelerators

From *Physical Review Focus*, June 11, 2010

For years, accelerator physicists have been working to make sense of a seemingly random rattling of the ground that affects the alignment of their equipment. Now one physicist has taken the most comprehensive look yet at such data from Europe, Japan, and the United States, and reports his results in the 11 June *Physical Review Letters*. The ground's haphazard jiggling, he says, conforms to a simple mathematical description that was proposed decades ago. Understanding this ground motion may prove useful in the design of future particle accelerators likely to dwarf those in use today.

Accelerator physicists obsess over the stability of the ground, as it is crucial for the proper functioning of their machines. For example, staff at the Fermi National Accelerator Laboratory (Fermilab) in Batavia, Illinois, use a variety of devices to watch for subtle shifts in the position of their Volkswagen-sized magnets that guide particles. One technique uses a horizontal pipe half-filled with water that stretches around much of the Fermilab ring. Sensors measure micron-scale changes in the depth of the water that reflect tiny changes in elevation.

[Read more](#)

[Fermilab Today](#)[Result of the Week](#)[Safety Tip of the Week](#)[CMS Result of the Month](#)[User University Profiles](#)[ILC NewsLine](#)**Info**[Fermilab Today](#)

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www.fnal.gov/today/

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suggestions to:

today@fnal.gov

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[home page](#)[Unsubscribe](#) from *Fermilab**Today***E-Verify might require new I-9 forms from certain employees**

On Jan. 29, FRA's contract with the Department of Energy was amended to require use of the E-Verify system. E-Verify is an electronic system operated by the Department of Homeland Security that enables employers to verify identity and work authorization. This contract change requires Fermilab to review the I-9 employment eligibility forms of current employees hired between Nov. 7, 1986, and June 1, 2009.

For most employees, previously supplied information and documents meet the E-Verify system requirements. However, the new regulations, or the limitations of the E-Verify system, require that Fermilab complete a new Form I-9 for certain employees. In these cases, the employee will receive two separate e-mails from donotreply@perfectcompliance.com: one containing a login name and instructions and a second containing a password to Fermilab's online I-9 system. The employee must log into the system to complete Section 1 of the electronic I-9 form by entering certain biographic information, verifying that the information is accurate and digitally signing the form. The employee then must schedule a meeting with HR Services to present documentation supporting the new I-9 form. To minimize inconvenience, HR Services staff will hold such meetings at locations close to affected employees.

The HR Services staff thanks all affected employees for their patience with this important task. Please see our [E-Verify Q&A](#). If you have questions, please e-mail everify@fnal.gov.

In the News**Taking science to the streets**From *Chicago Tribune*, June 7, 2010*Nobel laureate fields questions on Michigan Avenue*

How is the universe going to end? Should scientists explore the God question? Can physics help quell the oil spill in the Gulf? Will the Blackhawks defeat the Flyers on Sunday night?

Those were some of the burning questions dozens of science fans asked Nobel laureate Leon Lederman, who set up shop Sunday near the Michigan Avenue Bridge. The

Accelerator Update

June 4-7

- Five stores provided ~64 hours of luminosity
- Booster ion pump had problems
- MINERvA (T-977) resumed taking beam

* The integrated luminosity for the period from 5/31/10 to 6/7/10 was 68.54 inverse picobarns. NuMI reported receiving $8.57E^{18}$ protons on target during this same period.

[Read the Current Accelerator Update](#)[Read the Early Bird Report](#)[View the Tevatron Luminosity Charts](#)**Announcements****Latest Announcements**[Barn dance - June 13](#)[Fermilab's Family Outdoor Fair - June 13](#)[Ask HR: 15th floor visits DZero on Wednesday, June 9](#)[Ask HR: 15th floor visits PPD - SiDet on Wednesday, June 16](#)[Fermilab prairie quadrat study](#)[Deadline for The University of Chicago Tuition Remission Program - June 25](#)[Adult water aerobics - Mondays](#)[Adult swim lessons - Mondays](#)[Learn about green science in Nature's Power Lab, a Science Adventure](#)[International Folk Dancing resumes in Auditorium June 10](#)[Blood drive June 21 and 22](#)[Pool opens today](#)[Earned Value Management \(EVMS\) - June 8 and 9](#)[Lecture Series: Intermediate/Advanced Topics in C++](#)[Diversity Office volunteer opportunity](#)

Chicago Council on Science and Technology sponsored the event to show people that science is accessible, said President Alan Schriesheim.

Jonathan Shobrook, 11, of Highland Park, asked about a theoretical particle called the Higgs boson, known as the "God particle." Physicists believe Higgs may give mass to all things and could explain how the universe is put together. Shobrook, who will enter seventh grade this fall, showed Lederman a chart he made about the particle.

[Read more](#)

[through today](#)

[10,000 Steps-a-Day walking program](#)

[Sand Volleyball held on Tuesdays began May 25](#)

[Video series on scientific case for God's existence starts June 15](#)

[Fermilab Arts Series presents Corky Siegel and Chamber Blues - June 26](#)

[Sign up for summer Science Adventures classes](#)

[Introduction to LabVIEW course - July 13](#)

[Embedded Design with LabVIEW FPGA and CompactRIO seminar - July 13](#)

[Interaction Management Coaching Forum - July 27](#)

[SciTech summer camps start June 14](#)

[Submit an announcement](#)