

Calendar

[Have a safe day!](#)

Tuesday, Feb. 9

1:30 - 5 p.m.

LPC Lectures on Hadron Collider Physics - Curia II
Speaker: Dan Green, Fermilab
Title: The Standard Model

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd floor X-over

4 p.m.

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

West

Speaker: Vahid Ranjbar, Tech-X Corporation

Title: Recent Upgrades to BBSIM

Wednesday, Feb. 10

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

[Fermilab Colloquium](#) - One

West

Speaker: Richard Lindzen, Massachusetts Institute of Technology

Title: The Peculiar Issue of Global Warming

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

[Upcoming conferences](#)

Campaigns

[Take Five](#)

[Tune IT Up](#)

H1N1 Flu

From *symmetry breaking*

New MINOS results “strongly disfavor” sterile neutrino, neutrino decay



Neutrinos generated at Fermilab are first measured by the MINOS near detector, pictured above, before traveling to the experiment's far detector in Minnesota.

Finding the truth, whether that means solving a crime or describing the nature of fundamental particles, is just as much about eliminating the wrong answers as it is about finding the right ones. The same way that ruling out an alibi for a suspect is an important step toward finding the bad guy, disproving a theoretical prediction is necessary in order to find the correct theory that explains the whole story.

In the search for a better understanding of neutrinos, the Main Injector Neutrino Oscillation Search, MINOS, recently put forth results that help rule out a theorized fourth neutrino and strengthen the case against the hypothesis of neutrino decay. MINOS co-spokesperson Rob Plunkett says the results “really start to close the loop” on some major theories that neutrino experiments set out to investigate.

The MINOS experiment begins at Fermilab, in Batavia, Illinois, where a neutrino beam is generated, and its composition measured by the MINOS near detector. The beam then travels 735 kilometers to the Soudan mine in northern Minnesota, where the MINOS far detector catches it.

[Read more](#)

Special Announcement

Director's Corner

The issues of the week

Two issues dominated last week. The first arose from the decisions about the LHC that followed from the Chamonix meeting, affecting the LHC's running schedule, the accelerator repairs and plans for future upgrades. The second was the unveiling of the President's budget for FY2011.



Pier Oddone

The results of the Chamonix meeting were presented [last Friday at CERN](#) in a series of presentations culminating in Steve Myers's summary. The most important decision was to run the LHC at 7 TeV center-of-mass energy for about two years or one inverse femtobarn, whichever comes first. After that, the LHC would be shut down to fix a few thousand interconnections once and for all, a shutdown that would require at least a year.

Coming out of the shutdown the accelerator would be ready for a long run at the full 14 TeV center-of-mass energy. Not surprisingly these plans brought the press asking how the extended run at low energy and relatively low luminosity would affect our own plans for the Tevatron. We support the decision to run the LHC conservatively. The planned first run of two years already opens significant physics opportunities beyond the Tevatron, so at this time we do not expect this decision to affect our own plans to conclude the Tevatron run at the end of FY2011.

While the schedule of the LHC is now more concrete, CERN will revisit the timing for the upgrades of the LHC accelerator and detectors. This could have consequences for our own plans in the US. In particular a rigorous examination of the limits on performance has raised questions about the need for the SPL, a major superconducting linac that CERN would build as part of replacing the LHC injection chain.

The President's budget request, unveiled Monday of last week, was favorable for both

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

Weather



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

Current Security Status

[Secon Level 3](#)

Wilson Hall Cafe

Tuesday, Feb. 9

- Breakfast: Bagel sandwich
- Golden broccoli soup
- Southern-style fish sandwich
- Coconut-crust ed tilapia
- Burgundy beef tips
- La Grande sandwich
- Assorted sliced pizza
- Chicken fajitas

[Wilson Hall Cafe Menu](#)

Chez Leon

Wednesday, Feb. 10

- Lunch
- Mahogany beef stew w/red wine & hoisin sauce
 - Horseradish mashed potatoes
 - Baked apples

Thursday, Feb. 11

- Dinner
- Closed

[Chez Leon Menu](#)

Call x3524 to make your reservation.

Archives

Lectures on hadron collider physics begin today

Fermilab scientist Dan Green kicks off a series of lectures on hadron collider physics today at 1:30 p.m. in Curia II. From the Higgs boson to supersymmetry, the lectures will outline the physics that scientists hope to uncover at the Large Hadron Collider. The talk will include results from the first collisions that occurred at the end of last year. Today's lecture will focus on rediscovering the Standard Model.

If you cannot attend in person, the LHC Physics Center will simultaneously broadcast the lectures on EVO, a video conferencing system. More information and a complete lecture schedule are available [online](#).

Photo of the Day

Congratulations to our new citizens



Fermilab Deputy Director Young-Kee Kim and Assistant Laboratory Director Roy Rubinstein celebrated receipt of their U.S. citizenships. Rubenstein received his citizenship in 2008 and Kim received her citizenship on Feb. 1.

Special Announcement

the National Science Foundation and the Department of Energy Office of Science. Despite the freeze on overall domestic spending the Office of Science has a proposed increase of 4.4 percent and high-energy physics a proposed increase of 2.3 percent. This is a good outcome for science in these very difficult times.

As we analyze the proposed budget for FY2011 at Fermilab, it is easy to conclude that we will have a very challenging year in 2011. We will be trying to ramp up the future programs at the same time that we extend the Tevatron run through a full year of operations with significantly increased power costs. We will need to exercise maximum efficiency and austerity. We might as well tighten our belts two more notches, starting now.

Accelerator Update

Feb.5-8

- Five stores provided ~63.75 hours of luminosity
 - MTest off due to LCW pump problem
 - Pelletron recovered from full discharge
 - TeV accessed to repair dipole lead
- *The integrated luminosity for the period from 2/1/10 to 2/8/10 was 50.47 inverse picobarns. NuMI reported receiving 7.99E18 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

[March 5 deadline for The University of Chicago Tuition Remission Program](#)

[Blood drive sign up](#)

[Ask HR session at PPD on Wednesday, Feb. 10](#)

[Engineers Week kick-off at Fermilab - Feb. 10](#)

[Service Award Program](#)

[2010 standard mileage reimbursement rate](#)

[Chicago Bulls discount tickets available online](#)

[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/

Send comments and

suggestions to:

today@fnal.gov

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[home page](#)[Unsubscribe](#) from *Fermilab**Today***CIGNA dental plan participants: delay in dependent enrollment**

The Illinois Young Dependent Law, which allowed extension of dental benefits to dependents up to age 26, went into effect Jan. 1. Fermilab employees who enrolled dependents under the Fermilab dental plans in connection with this law may experience a delay in claim processing. CIGNA has notified Fermilab's Benefits Department that the carrier is experiencing difficulties in processing claims. CIGNA has identified the cause of the problem and is working on resolution. CIGNA has not yet provided a timeframe for resolution, but employees should expect at minimum to allow a few more weeks for processing.

In the News**CERN gears up its computers for more atom smashing**From *Scientific American*, Feb. 8, 2010

When the Large Hadron Collider goes back online in a few weeks, CERN's IT systems will have to be flexible in order to process the spate of information

A deluge of high-energy physics data is headed toward servers in Geneva, Switzerland, later this month. That's because the European Organization for Nuclear Research (CERN) now says it plans to restart its Large Hadron Collider (LHC) soon for a run that could last as long as two years at a collision energy of seven TeV (tera-electron volts, 3.5 TeV per beam). As CERN ramps up the world's most powerful particle accelerator to operate well beyond its previous best performance, the lab's computer systems must likewise be tuned so they can properly capture and analyze all of this new output.

[Read more](#)[Introduction to Argentine Tango series of classes - FREE](#)[Qi Gong, Mindfulness and Tai Chi Easy for Stress Reduction](#)[Fermilab blood drive Feb. 15 and 16](#)[Excel 2007 Advanced class - Feb. 18](#)[Ukrainian egg decorating class - Feb. 22](#)[Weight Watchers at Work new session](#)[BLAST! The Movie: intro, film and Q&A - Feb. 19](#)[Applications accepted for awards in URA Visiting Scholars program](#)[Fermilab Management Practices seminar beginning - Feb. 11](#)[Fermilab Family Open House - Feb. 21](#)[Python Programming class - Feb. 24-26](#)[Conflict Management and Negotiation Skills - March 3 and 10](#)[Adobe Acrobat Professional 9.0 Level 1 class - March 4](#)[On-site housing for summer 2010 - March 8 deadline](#)[DreamWeaver CS3: Intro offered March 9 or March 16](#)[Adaptive Leadership: Coaching for Individual Differences class - March 9](#)[Excel Power User/ Macros class - March 11](#)[Hiring summer students for 2010](#)[FRA Scholarship 2010](#)[Additional activities](#)[Submit an announcement](#)