

Calendar

[Have a safe day!](#)

Tuesday, Dec. 8
11:30 a.m.

Traffic Safety Seminar on Safe Winter Driving - One West
Speaker: Maria Navarro, Illinois State Police Trooper
2:30 p.m.

[Particle Astrophysics Seminar](#)

- One West
Speaker: Lee Smolin, Perimeter Institute for Theoretical Physics
Title: Progress Report on Quantum Gravity
3:30 p.m.

DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
4 p.m.

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

Speakers: Valeri Balbekov and Valeri Lebedev, Fermilab
Title: Longitudinal Instabilities

Wednesday, Dec. 9
3:30 p.m.

DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
4 p.m.

[Fermilab Colloquium](#) - One West

Speaker: Lee Smolin, Perimeter Institute for Theoretical Physics
Title: Using the Universe as a Laboratory to Probe the Planck Scale

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

[Upcoming conferences](#)

Campaigns

Special Announcement

Winter weather warning

A [winter weather system](#) will move across the Chicago area this afternoon and into Wednesday, bringing possible blizzard conditions. Please read Fermilab's [Inclement Weather and Snow Policy](#) and talk to your supervisor if you have questions.

Fermilab will very likely remain open today. If Fermilab closes early today, *Fermilab Today* will send out the announcement as a special edition.

Fermilab will very likely remain open on Wednesday morning also. Check the Fermilab Web site and the local media to find out if the laboratory is closed. If the laboratory remains open, an employee may choose not to go to work because of inclement weather. The day will be counted as vacation time or leave without pay. This option allows employees to use their discretion in regard to their safety and family needs without being penalized during heavy snow or dangerous conditions. Employees arriving up to three hours late due to inclement weather will be paid for the full day, subject to supervisory approval.

The National Weather Service [Web site](#) is the best source for the latest weather information.

Remember, whatever the weather, please drive carefully. And remember to have a [winter kit](#) in your car with items such as an ice scraper, blanket, gloves, extra windshield washer fluid and more.

From *symmetry breaking*

DOE gives big boost to plans for new muon experiment



Director's Corner

Notable events



Hesheng Chen, Director of IHEP and Pier Oddone, Director of Fermilab during the recent US/China meeting at SLAC.

The last couple of weeks we have had some notable events, first among them the smooth turn-on of the LHC. Detectors are now collecting data at 0.9 TeV center-of-mass energy, a very important step in bringing the detectors and the machine to full performance. Both beams were brought to a record energy of 1.18 TeV per beam about a week ago, making the LHC the highest-energy collider in the world. There is clearly much yet to do to reach the full potential of the LHC, but these first steps augur well for the future. Congratulations to our colleagues at the LHC and to those at Fermilab who have worked so hard to get the accelerator and the CMS experiment ready for data.

Another important event where kudos are due is the outstanding safety performance of the laboratory for the last two months. With only one recordable (TRC) case and zero days away and restricted (DART) cases, the laboratory, albeit with a small statistical sample, is back to the performance of 2008. With the winter season upon us and the greater chance of slips and falls due to icy conditions, I urge you to exercise good judgment in all your activities, both at the laboratory and away from the laboratory.

The 30th meeting of the US/China Joint Committee on High Energy Physics took place at SLAC on Nov. 19 and 20. The collaboration between US laboratories and IHEP in China

[Take Five](#)

From left: Amy Allen, Doug Glenzinski, and Craig Group work on the Mu2e experiment test stand at Fermilab.

[Tune IT Up](#)

While all eyes have been on the startup of the Large Hadron Collider in Europe, the world's largest scientific experiment, a small team of researchers based in the United States has been toiling away.

[H1N1 Flu](#)

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

The group has focused its energies on planning an experiment that creates a plenitude of muons and could reveal new phenomena that could only result from unknown physics.

[Weather](#)

 Snow
33°/30°

That narrow focus, say the members of the Muon-to-Electron-Conversion experiment, will allow the Mu2e collaboration to indirectly search for new particles and let them look for signs of new types of interactions at energies up to 10,000 trillion electronvolts, far beyond the LHC's grasp. It also would help scientists to better understand future LHC discoveries.

[Extended Forecast
Weather at Fermilab](#)[Current Security
Status](#)[Secou Level 3](#)[Wilson Hall Cafe](#)

Tuesday, Dec. 8
- Breakfast: bagel sandwich
- Tomato bisque soup
- Lemon pepper club
- Beef fajitas
- Korean garlic chicken
- Grilled chicken Caesar salad
- Assorted slices of pizza
- Rio Grande taco salad

Mu2e got a big boost on November 24 with the US Department of Energy endorsement of the scientific need for the project, called Critical Decision-0. This marks the first stage of DOE's 4-stage approval process that projects must pass before construction can start.

"Every CD is an important milestone. CD-0 is unique in that most of the work is done by the DOE. The fact that they put in the work to push this through is a clear indication that they are serious about Mu2e," says Ron Ray, project manager. "The ball is now in our court, and we have a lot of work to do."

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

Wednesday, Dec. 9
Lunch
- Salmon Wellington
- Parmesan orzo
- Lemon pound cake with blueberry sauce

The idea behind the Mu2e experiment isn't new—the similar and well-reviewed [Muon to Electron COConversion](#) (MECO) experiment proposed at Brookhaven National Laboratory in Long Island was canceled in 2005 for lack of funding. But funding agencies and research experts say the time now is right for such an endeavor. The US Particle Physics Project Prioritization Panel (P5) recommended construction of Mu2e in any federal budget funding scenario and Fermilab's Physics Advisory Panel, comprised of global experts in the field, endorsed it.

[Read more](#)

— *Tona Kunz*

Special Announcement

Thursday, Dec. 10
Dinner
- Chestnut soup
- Lobster medallions with champagne butter sauce
- Spaghetti squash with scallions
- Steamed green beans
- Eggnog cheesecake with bourbon cream

[Chez Leon Menu](#)

Call x3524 to make your

continues to be vital. The progress in China since my first US/China meeting more than 20 years ago is breathtaking. The Daya Bay reactor neutrino experiment is the most ambitious in the world. Now China has world-class facilities in modern laboratories, including the tau-charm factory in Beijing, a modern synchrotron light source in Shanghai, a future neutron spallation source in Southern China and plans to develop a deep underground laboratory in Western China with horizontal access and great overburden. They do not even seem to be embarrassed by the use of good architecture as appears to have happened historically in most of our national laboratories. There are several areas where important collaborations between Fermilab and IHEP can take place. Our interests are aligned in high-intensity proton accelerators and underground laboratories, the next steps for scientific facilities in China.

[In the News](#)**LHC gets first results; step toward "God particle"?**

From *National Geographic*, Dec. 4, 2009

The Large Hadron Collider (LHC) is quickly making up for lost time: The first scientific results from the recently restarted particle accelerator have been announced—about two weeks ahead of schedule.

During the first collisions of the LHC's twin beams of protons, a machine called A Large Ion Collider Experiment, or ALICE, collected the results from a proton-proton smashup.

[Read more](#)

[Milestones](#)

Deaths:

Joe Leo, who worked at Fermilab for 26 years until a skiing accident this March, died Sunday. Visitation will take place tomorrow from 3-9 p.m. at Williams Kampp Funeral Home at 820 Pine St. in West Chicago. Funeral services will take place at 10:30 a.m. Thursday at Emmanuel Presbyterian Church at 29W260 Batavia Road in Warrenville. Check *Fermilab Today* later this week for more information.

[Accelerator Update](#)

reservation.

[Archives](#)

[Fermilab Today](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[CMS Result of the Month](#)

[User University Profiles](#)

[ILC NewsLine](#)

[Info](#)

[Fermilab Today](#)

is online at:

www.fnal.gov/today/

Send comments and

suggestions to:

today@fnal.gov

Visit the Fermilab

[home page](#)

Traffic Safety Seminar meets today in One West

For a quick refresher on how to stay safe driving this winter, Fermilab drivers can attend a traffic safety seminar today.

The seminar will take place from 11:30 a.m. to 12:15 p.m. today in One West.

Illinois State Police Trooper Maria Navarro and one of Fermilab's snowplow drivers will talk at the seminar about driving safely, what everyone should carry in their vehicles this winter and how to share the road with snow plows.

Chuck Morrison, of the Fermilab Security Department, encourages all employees to attend. Some attendees will receive door prizes.

Read up on winter safety tips published over the years in *Fermilab Today*:

- [Winter driving trends and tips](#)
- [The three factors of winter driving: visibility, traction and driving style](#)
- [How to prepare for winter driving](#)

[From Quantum Diaries](#)

Subatomic particles as Hollywood villains

I couldn't help it. At \$5.50 for a matinee showing, I just had to hear it for myself. I recently went to see the newest Armageddon thriller to hit the big screen, 2012. I couldn't resist because of this *New York Times* article about movie director Roland Emmerich and his tendency to destroy the world in his movies (Independence Day, The Day After Tomorrow). In particular, the article explains that in 2012 the earth tears itself apart when, "A monster solar flare shoots invisible neutrinos into the earth's core, cooking it like a Hot Pocket."

You have to love the Hot Pocket reference, but what drew me to see the movie was, of course, the neutrino as Hollywood star.



David Schmitz is a Fermilab physicist and a blogger for *Quantum Diaries*.

Dec. 4-7

- Six stores provided approximately 64.5 hours of luminosity

- MTest magnet suffered possible ground fault
- NuMI and MiniBooNE reported good running

* The integrated luminosity for the period from Nov. 30 to Dec. 7 was 49.6 inverse picobarns. NuMI reported receiving 6.65E18 protons on target for the same period.

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

[Announcements](#)

Latest Announcements

[Give the gift of movies](#)

[Book atrium events through the Office of Communication](#)

[FMLA and FTL policy updates](#)

[Wilson Hall stocking stuffer holiday sale - Dec. 9-10](#)

[Gay, Lesbian or Bisexual Employees at Fermilab - information meeting Dec. 10](#)

[Gallery talk by Peter Olson - Dec. 11](#)

[Register for Quigg symposium - Dec. 14-15](#)

[Free introductory martial arts classes - Dec. 14 and 16](#)

[Fermilab blood drive - Dec. 15-16](#)

[Inaugural potluck party - Dec. 16](#)

[Tell us about your Take 5 moment by Dec. 16](#)

[Fermilab Management Practices seminar beginning Feb. 11](#)

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

[Argentine Tango at Fermilab meets Wednesday nights](#)

[Prescription eyewear technician location change](#)

[See David's blog](#)

[Lederman Science Center holiday hours](#)

[Discount movie tickets available](#)

[Chicago Blackhawks discount tickets](#)

[Additional activities](#)

[Submit an announcement](#)