

## Calendar

Monday, Jan. 5

2:30 p.m.

[Particle Astrophysics Seminar](#)

- Curia II

Speaker: Adam Mantz,  
Stanford University

Title: Cosmological Tests  
Using X-Ray Observations of  
Clusters of Galaxies

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

All Experimenters' Meeting -  
Curia II

Special Topic: Optical  
Transition Radiation

Measurements of Pbar  
Transfers

Tuesday, Jan. 6

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

Accelerator Physics and  
Technology Seminar - One  
West

Speaker: Alexey Burov,  
Fermilab

Title: Head-Tail Modes for  
Strong Space Charge (Part 1)

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

## Weather

 Sunny  
28°/19°

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security  
Status

[Secou Level 3](#)

Wilson Hall Cafe

## Feature

### Fermilab-related experiments among top science stories



Fermilab's doubly-strange particle, the Tevatron and the LHC were among the top science stories of 2008.

Results from Fermilab-related experiments made a lasting impression on the scientific community in 2008. The *American Institute of Physics* named two projects involving the laboratory among the publication's top 10 scientific stories of the year.

The discovery by physicists from the DZero collaboration of a "[doubly strange](#)" particle, a new particle made of three quarks, the Omega-sub-b, made the list.

*Science* named the LHC as it's [phenomenon of the year](#). The magazine also named the Tevatron and NASA-DOE's Fermi Gamma Ray Telescope (formerly GLAST) among the magazine's top areas to [watch in 2009](#).

An article about the omega-sub-b particle discovery made [science news of the year](#) in the category of matter and energy in the publication *Science News*.

The LHC Grid was named second of [50 most-read](#) stories by *The Times*, in the publication's online version.

*Nature* included the LHC among its news of the year, and profiled Lyn Evans, LHC project leader, as the publication's [Newsmaker of the Year](#).

## In Brief

## Safety Tip of the Week

### Walk carefully



[Be careful on ice.](#)

Slips on ice and snow-covered surfaces commonly cause accidents at Fermilab during the winter months.

While FESS's Roads and Grounds Department tackles this problem every year, it will put particular focus on frequently used areas, said Mike Becker, department head.

To better assure ice control, he expects to use as much salt as in the past, even though less total area needs clearing. In addition, some of Becker's crew come in early, about 5 a.m., to check whether overnight conditions have created any problems. They look for places where ice or snow that melted the previous day has refrozen. In the past, these types of refrozen areas have caught people off guard and caused injury.

You can do things to help Roads and Grounds reduce the number of slips during the winter season:

Use footwear that provides traction on snow and ice.

- Analyze the surface before you start out. Avoid unshoveled or ice-covered areas. When opening a vehicle door after parking, check the ground for "black ice."
- If you must walk on ice, take short steps or shuffle your feet. Bend slightly and walk flat-footed with your center of gravity over your feet. Hang onto railings or other stable objects. Use your vehicle for support when entering or exiting it.
- When you carry something, it can block your view and/or shift your balance, so be

Monday, Jan. 5

- French Quarter gumbo
- French dip w/horseradish cream sauce
- Smart cuisine: Santa Fe pork stew
- Smart cuisine: country baked chicken
- \*Spicy hot greek wrap
- Assorted slice pizza
- Sweet n' sour chicken w/egg roll

\*Carb restricted alternative

[Wilson Hall Cafe Menu](#)

**Chez Leon**

Wednesday, Jan. 7  
Lunch

- Chicken enchiladas
- Refried beans
- Spanish rice
- Pineapple flan

Thursday, Jan. 8  
Dinner

- Closed

[Chez Leon Menu](#)

Call x3524 to make your reservation.

**Archives**

[Fermilab Today](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[ILC NewsLine](#)

**Info**

*Fermilab Today*

is online at:

[www.fnal.gov/today/](http://www.fnal.gov/today/)

Send comments and suggestions to:

[today@fnal.gov](mailto:today@fnal.gov)

## Vladimir Shiltsev elected APS Fellow

Fermilab scientist Vladimir Shiltsev was elected an American Physical Society Fellow in the Division of Physics & Beams, an honor bestowed annually on only one-half of one percent of the APS total membership. Shiltsev is the director of Fermilab's Accelerator Physics Center.



Vladimir Shiltsev

Shiltsev was selected as a fellow in the Division of Particles and Fields for his advancement of the understanding of accelerator performance limitations, particularly for seminal work on ground motion in electron-positron linear colliders and electron beam compensation in large hadron colliders.

He was among 225 new fellows elected in 2008.

Sezaki Mtingwa, a scientist who began his accelerator career working on intrabeam scattering at Fermilab was also elected as a fellow in the Division of Physics & Beams. Mtingwa is now a scientist at the Massachusetts Institute of Technology.

In the News

### Commentary: Reasons to be jolly about 2008

From *New Scientist*, Dec. 31, 2008

'Tis the season to be jolly, though after a year in which the much-anticipated Large Hadron Collider at CERN has been delayed, you might think particle physicists don't have much to be jolly about. Two very different developments, however, have made 2008 particularly exciting for them.

The first shows that with a good theory and hard work, we can unlock nature's deepest mysteries. The story began in the 1960s, when it was proposed that protons and neutrons are made up of constituents called quarks. Experiments then demonstrated that protons did contain point-like components. These bounced around inside protons as if they were free. So why didn't they get knocked out of protons when physicists smashed them

extra observant of the surface conditions. You also may want to ask a coworker to help you carry the object.

- If you see an icy or snowy patch that needs treatment, do not hesitate to contact Roads and Grounds at x3303.

**Accelerator Update**

Dec. 19-22

- Four stores provided ~48 hours of luminosity
- Pbar set new stacking record with a rate of 28.32 mA/hr
- Recycler cooling problems fixed
- Service building problems due to low temperatures
- MiniBooNE, NuMI, and Recycler suffer from kicker problems

The Integrated Luminosity for 12/15/08 to 12/22/08 was 47.59 inverse picobarns.

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

**Announcements**

[Have a safe day!](#)

[Science Chicago hosts Mythbusters](#)

[Python Programming - Jan. 6 - 8](#)

[Winter Driving Skills Seminar - Jan. 7](#)

[Outlook 2007 New Features classes scheduled Jan. 15 and Feb. 3](#)

[Intermediate / Advanced Python Programming - Jan. 27 - 29](#)

[Additional Activities](#)

[Submit an announcement](#)

about in accelerators?

[Read more](#)