

## Calendar

### [Have a safe day!](#)

Wednesday, Dec. 2

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

[Fermilab Colloquium](#) - One

West

Speaker: Keith Dienes,  
University of Arizona/National  
Science Foundation

Title: Probing the String

Landscape: Implications,

Applications and Controversies

Thursday, Dec. 3

2:30 p.m.

[Theoretical Physics Seminar](#) -

Curia II

Speaker: Andrey Katz,

University of Maryland

Title: Signals of Sneutrino

NLSP at the LHC

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

THERE WILL BE NO

ACCELERATOR PHYSICS

AND TECHNOLOGY

SEMINAR TODAY

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

### [Upcoming conferences](#)

## Campaigns

### [Take Five](#)

### [Tune IT Up](#)

## H1N1 Flu

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

## Weather

## Feature

### Tevatron's doctors keep the machine running well



[Tevatron mechanical support team members during the 2009 shutdown: Top, from left: Earl Shaffer, Sabina Aponte, Bill Dymond and James Williams. Bottom, from left: Derek Plant and Jerry Szabo.](#)

The mechanical technicians in the Tevatron's mechanical support group aren't doctors. But they play some at work, caring for the Tevatron.

"You're working long hours and the list of things to do is endless," said Sali Sylejmani, an employee in the mechanical support group. "It is like starting a surgery, you open the system and it needs to be closed up."

On a hot summer day during the recent shutdown, a pressure indicator showed a possible leak in one of the Tevatron magnets. The team, made of five permanent members and a handful of other specialized technicians, carried several tons of diagnostic equipment into tight quarters underground. They used it to check for leaks in each problem area in the sector until they found and repaired the leak. Repairs can include replacing something small, such as a bad seal, or replacing a magnet, which could take up to two or three shifts.

"What we do is not easy," said Derek Plant, mechanical technician. "We have to pay close attention to many variables."

Often, the process for finding a leak or a malfunctioning or broken piece of equipment takes a unique instinct and mechanical aptitude, said McCormick, supervisor for the Tevatron's mechanical support group.

The stressful work and long hours creates

## Special Announcement

### Mark your calendar: Inaugural potluck party is Dec. 16

This year, to celebrate the holiday season, Fermilab has decided to try something a little different. The laboratory's inaugural potluck party will take place from 5-8:30 p.m. on Wednesday, Dec. 16.

Between 5 and 7 p.m., Fermilab employees, users, contractors, funding agency employees and their families and friends will gather in the Wilson Hall atrium to enjoy a wide variety of cultural cuisine. Please bring to share an appetizer, main dish or dessert. Foods representing your ethnicity or culture will be appreciated, but are not required. The laboratory will provide non-alcoholic beverages.

From 7-8:30 p.m., the evening's entertainment will take place in Ramsey Auditorium. Rocky Kolb will emcee the event, which will include skits, songs and more. View the program and find out more at the party [Web site](#).

## From *The University of Chicago*

### Collaborative seed grants spark DOE support

During the past 13 years, the University of Chicago has awarded more than \$8 million in collaborative seed grants (current collaborative seed grants) to research teams at the University, Argonne National Laboratory and Fermi National Accelerator Laboratory to strengthen collaborations between the three institutions. Two teams that began their research with seed funding recently received a combined \$9.5 million from the U.S. Department of Energy to continue their projects.

Steven Sibener, the Carl William Eisendrath Professor in Chemistry and the James Franck Institute, and Lance Cooley, a Fermilab materials scientist, partnered to study next-generation materials to improve the technology for making superconducting cavities, key components that increase the speed of particles as they travel through accelerators. The project eventually earned a \$1.5 million award from the DOE's Office of High Energy Physics.

Cloudy  
41°/24°

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

[Current Security Status](#)

[Secon Level 3](#)

[Wilson Hall Cafe](#)

Wednesday, Dec. 2  
- Breakfast: English muffin sandwich  
- Portabello harvest grain  
- Santa Fe chicken quesadilla  
- Hoisin chicken  
- Parmesan fish  
- Cuban panini  
- Assorted slices of pizza  
- Pesto shrimp linguini with leeks and tomatoes

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

Wednesday, Dec. 2  
Lunch  
- Jalapeño and cream cheese  
- Stuffed pork tenderloin  
- Scalloped potatoes  
- Steamed green beans  
- Hazelnut torte with cream anglaise

Thursday, Dec. 3  
Dinner  
- Mushroom duxelle  
- Duck breast with lingonberry sauce  
- Wild rice  
- Brussels sprouts  
- German apple cake

[Chez Leon Menu](#)

Call x3524 to make your reservation.

[Archives](#)

camaraderie. The team members joke with each other, but they also know about each others' families and more.

"It takes a very special group of people with good communication and a good demeanor," Plant said.

That openness also translates into a team with a good safety record. Each day for the team begins over coffee, where they go over any pertinent information.

"During coffee, we relay information, talk about the previous day and any safety issues. We'll review the safety procedures and make sure that we have the tools and equipment we need," McCormick said.

When the machine breaks, the team often turns their lives upside down to make repairs.

"Without that type of dedication, it would be impossible to get the work done," McCormick said. "These team members really give a lot to keep the Tevatron operating well."

-- *Rhianna Wisniewski*



These technicians also worked diligently as part of the Mechanical Support Group during the shutdown. From left: Daniel Assell, TD senior technician, Irina Kubantseva, PPD senior technician, and Sali Sylejmani, AD senior technician and lead technician for the warm straight vacuum work in the Tevatron.

[In the News](#)

[Read more](#)

[Special Announcement](#)

## Register now for the ITEP Winter School of Physics

Registration is now underway for the 13th International Moscow School of Physics taking place Feb. 13-20. The deadline to register is Dec. 17.

Advanced undergraduates, graduates and postdocs who want to or plan to work in particle physics may attend. The workshop will include high-level sessions on some of the most cutting-edge physics topics dominating the field today, including:

- Flavor physics
- Perturbative and non-perturbative QCD
- Physics beyond the Standard Model
- Physics at LHC and ILC
- Neutrino physics
- Cosmology and astrophysics

A full preliminary list of speakers is available on the ITEP [Web site](#).

The ITEP Winter School of Physics began in 1973 and became international in 1994. Since 1998, the Moscow government has been a general sponsor. The official school language is English.

More information is available on the ITEP [Web site](#).

[In the News](#)

## Fermilab has no hard feelings toward lab that bested it

From the *Daily Herald*, Dec. 1, 2009

Fermilab lost its title Monday as the world's most powerful accelerator.

But instead of being hurt or jealous, officials at the federal laboratory in Batavia say they are thrilled.

"Extremely happy" is how Young-Kee Kim, the lab's deputy director, described the mood after the new Large Hadron Collider, located on the French-Swiss border near Geneva, bested Fermilab's eight-year-old record. "We are a big part of the LHC."

[Read more](#)

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is online at:

[www.fnal.gov/today/](http://www.fnal.gov/today/)Send comments and suggestions to:  
[today@fnal.gov](mailto:today@fnal.gov)Visit the Fermilab [home page](#)**Dark Energy Survey collaboration meets at SLAC**From *SLAC Today*, Dec. 1, 2009

Ninety-five percent of the universe is made of something mysterious and "dark," according to the standard cosmological model. And while a portion of that darkness-dark matter-may soon be better understood through experiments in deep underground mines and at CERN's Large Hadron Collider, most of it-dark energy-remains almost entirely inexplicable.

An international collaboration of researchers seeks to change that through the Dark Energy Survey. More than 100 DES collaborators are meeting at SLAC this week to discuss how they will map dark energy, the mysterious force that seems to accelerate the universe's expansion, to reveal why the universe is expanding at an ever-increasing rate.

"Dark energy is one of the biggest puzzles in physics and the Dark Energy Survey will explore new territory with four independent measurements," said Kavli Institute of Particle Astrophysics and Cosmology researcher Risa Wechsler, who chairs the science program for this week's collaboration meeting.

[Read more](#)**Special Announcement****"The Night Before Christmas Carol" performance Saturday**

Actor David zum Brunnen performs as Charles Dickens and 17 Dickensian characters in "The Night Before Christmas Carol", which will take place at 8 p.m. Saturday at Fermilab.

If you've read or watched performances of "A Christmas Carol," you've met Ebenezer Scrooge, Tiny Tim and three Christmas ghosts. Now meet Charles Dickens, the man behind the novel, in a one-man performance at Fermilab Saturday.

**Safety Update****ES&H weekly report, Dec. 1**

This week's safety report, compiled by the Fermilab ES&H section, includes no injuries. We have now worked 40 days since the last recordable injury. Find the full report [here](#).

[Safety report archive](#)**Announcements****Latest Announcements**[Tell us about your Take 5 moment by Dec. 16](#)[Gallery talk by Peter Olson - Dec. 11](#)[Sign up for spring Science Adventures classes](#)[Yoga class promotion - Dec. 1-22](#)[Long-distance caregiving seminar today](#)[Weight Watchers at Work program today](#)[Overcome your fear of public speaking - Toastmasters Dec. 3](#)["The Night Before Christmas Carol" at Fermilab Arts Series - Dec. 5](#)[English Country Dancing, Dec. 6](#)[Wilson Hall stocking stuffer holiday sale - Dec. 9-10](#)[Gay, Lesbian or Bisexual Employees at Fermilab - information meeting Dec. 10](#)[Register for Quigg symposium - Dec. 14-15](#)[Free introductory martial arts classes - Dec. 14 and 16](#)[Fermilab blood drive - Dec. 15-16](#)[Fermilab Management Practices seminar beginning Feb. 11](#)[Prescription eyewear technician](#)

"The Night Before Christmas Carol" will give audiences a historically accurate and humorous glimpse into the life of Charles Dickens in 1843 on the night before he dreamed up his world-famous novel. Renowned Dickens scholar and playwright Elliot Angel wrote the play, which is appropriate for the entire family.

The 90-minute performance, which is part of the Fermilab Arts Series, begins at 8 p.m. Saturday in Ramsey Auditorium.

Tickets are \$18 for general audiences and \$9 for ages 18 and under. To purchase tickets call (630) 840-ARTS (2787), or go to the Box Office, temporarily located on the 15th Floor of Wilson Hall weekdays from 9 a.m. to 4 p.m.

More information is available [here](#).

[location change](#)

[Lederman Science Center holiday hours](#)

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[Chicago Blackhawks discount tickets](#)

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