

## Calendar

**Friday, Dec. 7**

**3:30 p.m.**

DIRECTOR'S COFFEE  
BREAK - 2nd Flr X-Over

**4 p.m.**

[Joint Experimental-Theoretical  
Physics Seminar](#) - One West

Speaker: G. Bernardi, LPNHE  
Paris

Title: Combination of SM Higgs  
Results at DZero

**8 p.m.**

[Fermilab International Film  
Society](#) - Auditorium

Tickets: Adults \$5

Title: Memento

**Monday, Dec. 10**

**12 p.m.**

[Special Particle Astrophysics  
Seminar](#) - The Dark Side, WH-

6NW (NOTE TIME &  
LOCATION)

Speaker: A. Upadhye,  
University of Chicago

Title: Chameleon Scalar Fields  
and the GammeV Experiment

**2:30 p.m.**

[Particle Astrophysics Seminar](#)

- Curia II

Speaker: E. Coccia, Gran  
Sasso National Laboratory

Title: Present and Future of the  
Gran Sasso Underground  
Laboratories

**3:30 p.m.**

DIRECTOR'S COFFEE  
BREAK - 2nd Flr X-Over

**4 p.m.**

All Experimenters' Meeting

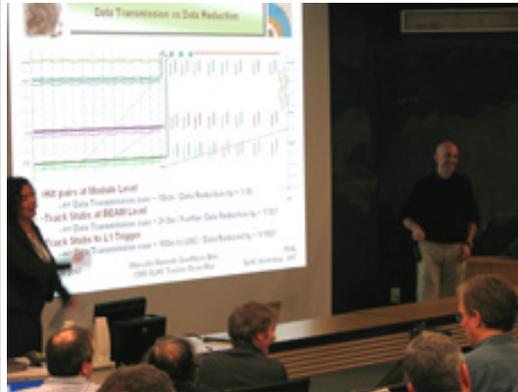
Special Topic: Antiproton  
Production Since the  
Shutdown - Curia II

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

## Weather

## Feature

### CMS tracker workshop connects people, ideas



Daniela Bortoletto, US-CMS SLHC upgrade coordinator and workshop co-organizer and Marcello Mannelli, deputy project manager of the CMS tracker, give a presentation on the design of the CMS tracker for the LHC upgrade, Super LHC, at the CMS Tracker Upgrade workshop on Tuesday, Nov. 27.

CMS collaborators could see data from their experiment in a few months, but that doesn't mean planning is over. Collaborators from around the globe are taking a proactive approach and are already laying foundations for the experiment's next phase.

An estimated 80 collaborators joined together to strategize at the CMS SLHC Tracker Upgrade workshop on Nov. 27 and 28 to discuss a tracker upgrade they hope to implement 10 years after experiment start up. The workshop was held at Fermilab, which gave a chance for more U.S. participation than typically possible.

The tracker, which is the inner-most layer of the detector, contains silicon sensors that allow scientists to track and measure the momentum of charged particles. An upgrade of the LHC, Super LHC, would increase the beam luminosity by an order of magnitude, producing a higher level of radiation as well as much higher particle density. The tracker components and technology would have to be upgraded to operate in the new environment. The catch is making the technological advances fit in within the confines of the current detector.

"We wanted to focus on crystallizing the ideas

## From ILC Newline

### US manufactured cavity achieves high gradient



Damon Bice, a Fermilab technician studying at JLab for the year, disassembles the AES2 cavity from the test stand for another round of electropolishing and vertical tests. *Image courtesy of JLab*

Laboratory. "This is the first US-built ILC nine-cell cavity to reach a gradient close to the ILC specification," said Rongli Geng, the lead scientist at JLab on the nine-cell high-gradient cavity processing R&D. JLab scientists are hopeful that the cavity, dubbed AES2, will reach an even higher gradient after further processing.

The target gradient for each ILC cavity is 35 MV/m, and ILC scientists around the world are working toward this goal. The AES2 gradient is significant because it demonstrates the increasing capabilities of US cavity vendors. In comparison to manufacturers in Europe and Asia, US vendors are considered new to the game and reaching a gradient of 32.6 MV/m shows significant progress. "This is a very encouraging result," said Fermilab's Shekhar Mishra. "It shows that a US vendor can produce an ILC-quality cavity. JLab is doing an excellent job in advancing the high gradient cavity processing R&D."

[Read more](#)

-- Elizabeth Clements


**Cloudy 30°/11°**
[Extended Forecast](#)  
[Weather at Fermilab](#)
[Current Security Status](#)
[Secon Level 3](#)
[Wilson Hall Cafe](#)

### Friday, Dec. 7

- Old fashioned ham & bean
- Philly style chicken
- Braised pork chops
- Baked fish over rice
- Roasted veggie & provolone panini
- Assorted pizza slices
- Baked potato

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

### Wednesday, Dec. 12 Lunch

- Stuffed pork loin w/ lingonberry sauce
- Braised red cabbage
- Dilled new potatoes
- Danish apple cake

### Thursday, Dec. 13 Dinner

- Closed

[Chez Leon Menu](#)

Call x4598 to make your reservation.

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[Fermilab Today](#)
[Result of the Week](#)
[Safety Tip of the Week](#)
[ILC NewsLine](#)
[Info](#)

that were floating around," said Purdue University-based Daniela Bortoletto, workshop co-organizer and US-CMS SLHC upgrade coordinator.

[Read more](#)

-- *Rhianna Wisniewski*

### Photos of the Day

### Precious cargo



University of California at Davis physicist John Conway and post-doc Ricardo Vasquez examine a CMS pixels detector half-disk before taking it to CERN. The two final half-disks were hand-carried by Conway and Vasquez. All arrived safely Wednesday.



University of California at Davis physicist John Conway loads metal cases containing the remaining two half disks for the CMS pixels detector into a car Tuesday afternoon.

### Special Announcement

## Gran Sasso director gives presentation Monday



Eugene Coccia, Director of the [Gran Sasso Laboratory](#), will give a presentation Monday on the current state and the future of Gran Sasso's Underground Laboratories at 2:30 p. m. in Curia II. All are welcome to attend.

### Announcements

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

#### EAP Office hours

The EAP office will be open on Tuesday, Dec. 11, and Thursday, Dec. 13, instead of Wednesday, Dec. 12, and Friday, Dec. 14, as usual. Regular office hours will resume the week of Dec. 17. The EAP is available 24/7 by calling 1-800-843-1327 or online at [www.vmceap.com](http://www.vmceap.com).

#### New IT job descriptions

Open meetings for questions and answers will be held in WH One West for employees affected by this process:

Wednesday, Dec. 12, 1:30 -3 p.m.

Thursday, Dec. 13, 9 - 10:30 a.m.

Friday, Dec. 14, 10:30 a.m.- noon

Monday, Dec. 17, 1:30 - 3 p.m.

Tuesday, Dec. 18, 9 - 10:30 a.m.

Wednesday, Dec. 19, 9 - 10:30 a.m.

Before attending, please review the [presentation](#)

#### Blood Drive Dec. 18, 19

Mark your calendars. Heartland Blood Centers will be here for the Fermilab Blood Drive on Dec. 18 and 19 from 8 a.m to 2 p.m. in the Wilson Hall Ground Floor NE Training Room. Appointments can be scheduled on the [Web](#) or by calling Diana at x3771 or Margie at x5680. More information can be found [here](#).

#### Dec. 14 deadline for The University of Chicago Tuition Remission Program

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)

Read more about [Fermilab's role](#) in the CMS pixels experiment.

Read more about [hand carrying](#) fragile detector elements to CERN.

#### In the News

### Persis S. Drell named fourth Director of SLAC

From *SLAC press release, Dec. 6, 2007*

Menlo Park, CA—Persis S. Drell has been named director of the Stanford Linear Accelerator Center (SLAC), effective immediately, Stanford University President John Hennessy announced Thursday. Drell, a professor of physics at SLAC, has held a series of senior positions at the laboratory since 2002 and has served as acting director since September. Stanford University operates SLAC on behalf of the U.S. Department of Energy's (DOE) Office of Science.

Supportive of Drell's appointment, U.S. Secretary of Energy Samuel W. Bodman said he was pleased to have such a qualified individual leading SLAC, furthering departmental support for breakthroughs in science and technology so the nation remains at the forefront of innovation and continues to lead the world in basic energy sciences.

[Read more online](#)

The deadline for applying for the tuition remission program at The University of Chicago for the Winter 2008 quarter is Dec. 14. [More information and enrollment forms.](#) Contact Nicole Gee at x3697 with any questions.

#### Fermilab barn dance Sunday

The Fermilab Folk Club will host a barn dance on Sunday, Dec. 9 at 6:30 p.m. with music by the Second Hand Band and calling by Allan Sundry. [More information](#)

#### Classifieds

New [classified ads](#) have been posted on *Fermilab Today*.

#### [Additional Activities](#)