

## Calendar

**Tue., November 21**

**3:30 p.m.** Director's Coffee Break - 2nd floor crossover  
THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

**Wed., November 22**

**11:00 a.m.** Fermilab ILC R&D Meeting  
Speaker: R. Kephart and S. Mishra, Fermilab  
Title: Events and Highlights from the Valencia GDE Meeting  
THERE WILL BE NO FERMILAB COLLOQUIUM THIS WEEK  
THERE WILL BE NO DIRECTOR'S COFFEE BREAK TODAY

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

## Weather



Partly Cloudy 51°/31°

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

## Current Security Status

[Secon Level 3](#)

## Wilson Hall Cafe

**Tuesday, November 21**

- Creamy Turkey Vegetable
- Chicken Gyros
- Salisbury Steaks with Mushroom Au Jus
- Chicken Cacciatore
- Italian Panini with Provolone
- Assorted Slice Pizza
- Super Burrito

[Wilson Hall Cafe Menu](#)

## Chez Leon

## Feature Story

### Pisa takes the Owl Shift



Pierluigi Catastini covers a shift for CDF from Pisa. The control rooms are connected by network and streaming video and separated by 4,700 miles. [Click the image to see view at CDF.](#)

Scientists from opposite sides of the world often work in the same control room on the same shift. Scientists who work the same shift from control rooms on opposite sides of the world, though, are a bit of a novelty.

If you happen to be around the CDF control room during the owl shift, 12:00 a.m. to 8:00 a.m., in the next few days you'll find they are one man down. Three people are at work instead of the usual four. A physicist in Pisa covers the position normally manned by this fourth person, data quality monitoring. For those in Pisa, the Batavia owl shift is a friendlier 7 a.m. to 3 p.m. daytime shift.

Pisa is able to monitor data through a network connection, browsing a CDF webpage. A live video connection between Pisa and CDF keeps the team, separated by 4,700 miles, coordinated. "Human communication is essential," said Kaori Maeshima, Fermilab physicist who works on remote detection operations for both CDF and CMS. "The person viewing results must be able to say, 'Hey guys, something's wrong--you'd better look at it.'"

CDF and their Pisa collaborators from the Istituto Nazionale di Fisica Nucleare benefit from this remote monitoring. "It's much nicer to work during the day than at night," said Fabrizio Scuri, senior physicist at INFN. CDF spokesperson Rob Roser added, "It allows us to fill a difficult shift by exploiting the time

## Director's Corner

### Future collaborations



Pier Oddone and J-PARC Director Shoji Nagamiya in Japan. [Click the image to see Oddone and Nagamiya framed by the huge aperture of one of the RCS quadrupoles](#)

A team from Fermilab including myself, Young Kee Kim, Hugh Montgomery and Marc Ross is visiting KEK and J-PARC to explore the plans for particle physics in Japan and the opportunities for collaboration. We have many interests in common, starting with the ILC. The neutrino program with the complementary strengths of T2K in Japan and NOvA in the US is a powerful accelerator-based program for the next decade or more, but the evolution beyond the present plans is quite open with the possibility of super-beams, megaton-class detectors and neutrino factories. There are also common interests in rare decay experiments that provide indirect reach into new mass scales.

On Monday, Director Shoji Nagamiya and his team hosted us at J-PARC. It was a special day for J-PARC, marking the start of commissioning of the proton linac. By the end of the afternoon a 5 ma beam was past the RFQ and the commissioning was well on its way.

J-PARC is a brand new laboratory that will provide a varied program with a proton linac, a 3 GeV rapid cycling synchrotron (RCS) to be used for a 1 MW neutron spallation source and a 50 GeV synchrotron with a 0.75 MW proton beam for producing neutrinos for T2K and hadron beams for the study rare decays. It is hugely impressive to see the construction of such a multifaceted set of facilities all at once. In the US we have a roughly equivalent

**Wednesday, November 22  
Lunch**

Cheese Fondue  
Mixed Green Salad  
Grapefruit Slices w/Candied  
Rind

**Thursday, November 23  
Dinner**

Closed

[Chez Leon Menu](#)

Call x4598 to make your  
reservation.

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

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difference. That person is more alert than they would otherwise be."

Cost savings and avoiding travel are another practical boon. "It's expensive to take long trips to attend shifts," said Scuri. "We are suffering with budget cuts. If we can show we are making an effort to save money--that's good."

For Pisa the ability to participate in CDF, while staying in Italy, may attract other collaborators. "For the moment everyone is very glad," said Scuri.

The initial run of the remote shift, two weeks long, is scheduled to end next Saturday, November 25. If these remote shifts are successful, Pisa will take over the owl shift one week of each month, and other remote monitoring stations may be set up. DZero was the first Fermilab collider experiment to operate round-the-clock remote control room shifts, running detector monitoring from Brazil, India and Europe between 2003 and 2005.

While Fermilab's LHC remote operations center will work differently, the CDF and DZero remote shifts are important developmental steps. "It is a good working model," said Maeshima. "It is good implication that CMS will be successful."

--D.A. Venton

**Fermilab Press Release****Fermilab seeks nominations for  
Citizens' Task Force**

Fermilab officials have announced a plan to form a task force of local citizens to work with the laboratory on planning for a bid to host the International Linear Collider. The worldwide community of particle physicists has proposed the ILC as the world's next large particle accelerator. If a global decision is reached to build the ILC, the U.S. Department of Energy has expressed its interest in the possibility of hosting a linear collider at Fermilab, subject to cost and scientific validation.

"Strong community involvement will be essential to Fermilab's success in bringing the ILC to Illinois," said Fermilab Director Pier Oddone. "We are seeking to engage a wide spectrum of community leaders in a Citizens' Task Force that will provide input into key aspects of planning and decision-making for the proposed accelerator."

Currently, scientists and engineers from Europe, Asia and the Americas are at work on

set of facilities but only if we add the SNS at ORNL and the Main Injector at Fermilab. Some aspects of J-PARC, however, are unlikely to have a counterpart in the US, especially in the study of kaon and muon decays where Japan has made a commitment to a very active program and is building a large experimental hall to house multiple experiments. All experiments of this nature have ended or been cancelled in the US. On the other hand, recycling of equipment used in past rare decay experiments at Fermilab and at BNL will be useful to some of the experiments proposed for the JPARC program. More generally, the role of Fermilab in support of the participation of US groups in this program is yet to be defined.

Yesterday was only the start of many discussions to come as particle physics becomes even more global than today. Of course, every region has ambitions to host the ILC--today we will be exploring ILC collaborations at KEK. But since only one region will get to host the ILC, it is important to take a global view of other aspects of the field and find opportunities for collaboration complementary to the ILC as we collectively build a global program.

**Photo of the Day**

**Slice by slice:** One slice at a time, the massive CMS detector is being lowered 300 feet below ground. Fred Borcherding of PPD/CMS sent this picture from CERN, taken last Friday in the above-ground assembly hall. "You can see End cap YE+3 [one of the slices], just moments after it was moved into its lowering position on the cover of the shaft," he writes. "To the lower right you can see the rigging crew that has just finished moving it." End cap YE+3 will be lowered into the underground cavern during the week of November 28.

If you click the image, you'll look the other direction, at End cap YE+2, as it begins its preparations for lowering. On the face of the end cap, you can see the muon chambers made by the US-CMS collaboration.

determining the design and cost of the proposed ILC, which would require participation from many nations. Their report is expected in February 2007. The construction and operations of the ILC would play a key role in Fermilab's future and the future of U.S. research in particle physics. The ILC would occupy a 20-mile-long tunnel some 500 feet below ground.

- [Read More](#)
- [Nominate a task force member](#)

#### In the News

### **Seed Magazine, November 20**

#### **Why the US should spring for a new particle accelerator**

*The US must develop a compelling bid to host the International Linear Collider in order to safeguard American science.*

Physics in the United States is at a crossroads. There are scientific discoveries just within reach whose impact is likely to transform and even transcend the field. Yet US particle physics facilities are being closed or converted to other uses, federal investments are stagnating, and the intellectual center of gravity is moving overseas with the construction of new facilities in Europe and Japan.

These were the conclusions of the committee for the National Academy of Sciences, which I had the honor of chairing. Our mandate was to examine the current state, and make recommendations regarding the future shape, of a US particle physics program that has yielded innumerable discoveries and played a defining role in American scientific leadership.

[Read More](#)

See more pictures and a read a description [here](#).

#### Accelerator Update

#### **November 17 - 20**

- Three stores provided 39 hours and 26 minutes of luminosity
- Preaccelerator switched to I- Source
- Recycler has cooling problems
- Pbar target air-pressure pump shaft breaks
- Store 5082 hits third largest luminosity with 210.12E30

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

#### Announcements

#### **Rules about alcohol at holiday parties**

As the holiday season approaches, it's important to remember that Fermilab does not permit the serving of alcoholic beverages on site other than at approved laboratory functions. Please be sure that all employees, users, contractors and visitors are aware of this rule, and that it is strictly enforced.

#### **Discount tickets**

The Recreation Office is offering discounted tickets to Chicago Performances. The following programs are being offered: Ringling Bros and Barnum & Baily Circus, Chicago Blackhawks, Circus of Dreams, Radio City Christmas Spectacular, the Mikado, and Fermilab Night with the Bulls. Tickets are ordered direct. Order forms can be found on the [Recreation Website](#) or in the Recreation Office.

#### [Upcoming Activities](#)