

## Calendar

**Fri., August 10**
**3:00 p.m.**

 DIRECTOR'S COFFEE  
 BREAK - 2nd Flr X-Over  
 (NOTE TIME)

**3:30 p.m.**
[Joint Experimental-Theoretical  
 Physics Seminar](#) - One West  
 (NOTE TIME)

 Speakers: M. Neubauer (CDF),  
 University of Illinois, Urbana/  
 Champaign John Hobbs  
 (DZero), State University of  
 New York, Stony Brook  
 Title: New Results for Lepton-  
 Photon 2007 from CDF and  
 DZero

**8:00 p.m.**

 Fermilab International Film  
 Society - Auditorium  
 Tickets: Adults \$5  
 Title: Die Blechtrommel (The  
 Tim Drum)

**Mon., Aug. 13**

 PARTICLE ASTROPHYSICS  
 SEMINARS WILL RESUME IN  
 THE FALL

**3:30 p.m.**

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

**4:00 p.m.**

 All Experimenters' Meeting -  
 Curia II

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

## Weather



Sunny 93°/71°

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

## Current Security Status

[Secon Level 3](#)

## Wilson Hall Cafe

## Special Announcement

### Pickets at Fermilab gates this morning

The people you may have seen carrying signs at Fermilab's gates this morning are union representatives picketing because of a dispute between a labor union and a nonunion sub-contractor performing work at Fermilab.

## Feature

### Meson Lab roof repairs aim to re-engineer art


[Workers repair the Meson Detector Building roof.](#)

When Robert Wilson oversaw construction of Fermilab's facilities in the 1970's, he attempted to merge aesthetic appeal with scientific functionality. While most of the lab's structures have fulfilled this mission, the Meson Lab has always been a bit of a troublemaker.

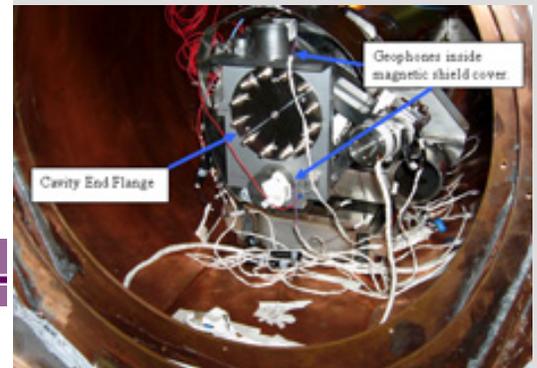
Completed in 1975, the Meson Lab possesses one of the most unusual architectural features on the Fermilab campus: a roof consisting of 12 concave arches designed by Wilson and artist Angela Gonzalez. But while visually striking, the roof falls short in one big way -- it leaks.

"It's an old building with steel joints that tend to loosen with time," said Elaine McCluskey, AD project engineer. "Loosened joints mean leakage."

This isn't a new problem. Water began dripping from the ceiling soon after the building's completion, and all attempts at repair to date have failed. A team of engineers and contractors is currently mounting an effort to fix the leaks. Success is crucial, as the lab

## From ILC Newline

### Good vibrations at Fermilab



[Two of the geophones installed in Fermilab's Horizontal Test Stand.](#)

Vibrations in the cryomodules in the International Linear Collider are actually not a good thing. The slightest disruption can throw off the alignment of the super sensitive beams and prevent them from colliding. The stringent beam dynamic requirements in the ILC therefore make vibration studies important, which is why Fermilab recently installed measuring devices called geophones in their Horizontal Test Stand. So for the team at Fermilab, detecting vibrations now, during an R&D phase, is actually a good thing because it means that they can learn how to minimise them in the actual machine when every collision counts.

[Read more](#)

-- Elizabeth Clements

## In the News

### From European Science Foundation Aug. 7, 2007:

**EURYI award project to store antimatter in box like 'office bin'**

Physicists want to study antimatter much more closely and confirm beyond all doubt that it really is the exact opposite of the matter we observe in everyday existence, but there is a problem. Antimatter is very difficult to make, and even harder to store afterwards, making it more precious to scientists than gold. The moment it comes into contact with the normal

**Friday, Aug. 10**

- New England Clam Chowder
- Black & Blue Cheese Burger
- Mardi Gras Jambalaya
- Swedish Meatballs
- Bistro Chicken & Provolone Panini
- Assorted pizza slices
- \*Carved Top Round of Beef

[Wilson Hall Cafe Menu](#)

**Chez Leon****Wednesday, August 15 Lunch**

- Chinese Chicken
- Mushroom Lettuce Cups
- Grilled Bananas w/Rum Sauce

**Thursday, August 16 Dinner**

- Smoked Salmon Napoleon
- Tournedos of Beef w/Madeira Sauce
- Cauliflower Gratin
- Vegetable of the Season
- Bourbon Walnut Pie

[Chez Leon Menu](#)

Call x4598 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)

is home to important International Linear Collider research, with more to come.

Under the management and oversight of FESS/Engineering, Riddiford Roofing Co. of Arlington Heights, Illinois, began the repair process last summer by cleaning the surfaces. The cold winter months forced a temporary break, but contractors resumed work early this summer, applying a light-blue primer to the arches and epoxy filling to the leaky joints. Concrete and urethane foam are being added to aid water drainage, and two final coats of a special elastomeric coating will finish the seal. In the end, the building will be returned to similar shades of the original blue and orange colors.

FESS and AD are satisfied with the work thus far. "We've made really good progress," McCluskey said. "Despite this summer's rain, we're working quickly and taking advantage of all the time we have. The building roof should be very nice when it's done."

ES&H coordinator Mike Andrews expressed a Meson Lab user's satisfaction. "The lab-space is much more comfortable, and most important, dry. I'm glad we could preserve the historical value of Wilson's design and get rid of the puddles at the same time," he said.

So what happens if the seal doesn't hold? "Riddiford has agreed to a 10-year warranty, so repairs are covered for at least that long," McCluskey said. "Hopefully, they won't be needed."

--J. Bryan Lowder



Once repaired, the roof of the Meson Lab will be blue and terracotta in color, similar to the original roof.

matter surrounding us it annihilates within a trillionth of second, so it has to be isolated and manipulated indirectly. Until now this has only been possible in large expensive apparatus using electric or magnetic fields to contain the antimatter.

Enter Japanese EURYI Award winner Dr. Masaki Hori. His project was chosen for one of a valuable EURYI Awards because Hori aims to break new ground in handling and storing anti-matter, in this case sub-atomic particles called anti-protons. These are the exact opposite of the protons within the nucleus of every atom, having negative rather than positive charge. He has been cooperating with the Max-Planck-Institute in Germany on this research.

[Read More](#)

**Announcements****FRA Scholarship Update**

FRA is pleased to announce its scholarship and tuition remission programs for various Illinois-based Universities. Employee Relations has placed the information on one website for your convenience. Please visit the [FRA Scholarship homepage](#) for links and contact information for each program.

**Wisconsin Dells Discount Book**

The final day to purchase the Wisconsin Dells Coupon book is August 17. Books are still available in the Recreation Office and the discounts are good until April 1, 2008. The cost of the book is \$20.

**Classifieds**

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

**Additional Activities**