

## Calendar

### Monday, Aug. 25

PARTICLE ASTROPHYSICS SEMINARS WILL RESUME IN THE FALL

**3:30 p.m.**

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

**4 p.m.**

All Experimenters' Meeting - Curia II

Special Topic: T-972 Radiation Shielding and Effects

### Tuesday, Aug. 26

**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.

## Weather



**Sunny**  
76°/52°

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

## Current Security Status

[Secon Level 3](#)

## Wilson Hall Cafe

## Feature

### SciBooNE detector parts move to other experiments



SciBooNE collaborators work on taking the neutrino experiment apart.

SciBooNE collaborators dug through piles of spare parts, untangling and categorizing dozens of cables to build their neutrino experiment last year.

Decommissioning its three subdetectors: SciBar, Muon Range Detector and the Electron Catcher this week will be easier.

The main bulk of the SciBar detector, borrowed from Japan's K2K experiment, will stay in the experiment hall, as will the steel plates for the MRD. Utilizing the SciBooNE equipment, a new experiment could start up by only replacing the electronics and photomultipliers. A couple groups already have expressed interest.

"It is a very robust, stable detector," said co-spokesperson Morgan Wascko, Imperial College London.

Although it took months to cobble SciBooNE together, collaborators will tear it down in less than three weeks. Removing and packing for shipment to KEK in Japan the 224 photo multiplier tubes and associated electronic panels will take the most time.

SciBooNE serves as the uber-example of parts sharing common to high-energy physics. Only the connectors, bolts and half the cables

## Safety Tip of the Week

### Sensible shoes for safety



Flip flop shoes such as this are not safe work attire.

During the past few months, Fermilab's Medical Department has seen an unusually large number of injuries associated with footwear choices. These injuries involved shoes that provide little

protection or support, are hard to walk in or are ill-fitting.

Here are some guidelines to prevent shoe-related injuries:

- Footwear should always provide protection from anticipated occupational hazards.
- Wear shoes with a low heel to reduce leg and back strain and to prevent slips, trips and falls. High-heeled shoes shorten calf muscles, contribute to knee and back problems and increase the risk of falling. If you wear heels, choose styles with squared-off toes and shorter, chunkier heels.
- Choose a good fit. Shoes that do not fit right can cause blisters and contribute to injuries.
- Flip-flops and ballet-style footwear are not appropriate for everyday use. They offer little or no protection, minimal cushioning and no arch support. Walking in these types of shoes requires an unnatural toe-gripping gait.
- Avoid open-toed shoe styles and sandals. They offer little protection.
- Don't wear the same pair of shoes for days in a row. Alternating pairs of shoes protects your feet from repetitive stress.
- Disregard shoes that are worn out or have thin soles. When shoes are worn out, more energy is required to walk, greater impact is transmitted to your feet and the stability of your lower legs is reduced.

If you need protective safety footwear for work, you can find the footwear form [here](#).

**Monday, Aug. 25**

- \*Spicy beef & rice soup
- Corned beef Reuben
- \*Honey Dijon glazed pork loin
- \*Vegetable lasagna
- Chicken oriental wrap
- pineapple
- Assorted sliced pizza
- \*Pacific Rim rice bowl

*\*Smart Cuisine - Heart Healthy Choice*

[Wilson Hall Cafe Menu](#)

**Chez Leon****Wednesday, Aug. 27****Lunch**

- Salad nicoise with fresh grilled tuna
- Lemon cake with blueberry coulis

**Thursday, Aug. 28****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**

**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)

were purchased new.

Past Fermilab and KEK experiments provided the electronics and high-voltage system for the SciBar and MRD. Fermilab made SciBar's scintillate for use in Japan's K2K which later returned it for use in SciBooNE.

The Electron Catcher came to SciBooNE by way of K2K in Japan where it was constructed with calorimeter parts from Italy used in the CHORUS and HARP experiments at CERN. Italy's INFN also supplied the Electron Catcher's photo multiplier tubes and their electronics and the high-voltage system, which will return to Italy.

The Muon Range Detector photo multiplier tubes came from multiple sources. About 100 were borrowed from Kansas State University and the University of Rochester and will return there. The remainder came from Fermilab's KTeV experiment, wide-band lab, and SciBooNE member universities.

"Certainly some of our work would have been reduced by using newer equipment but the fact is we would have never got approval because the cost of our experiment would have been too high," Wascko said. "We reckon we saved over \$3 million."

-- Tona Kunz



[Collaborators celebrate SciBooNE's decommissioning at a party Friday, Aug. 22.](#)

**In the News****Accelerator Update****August 20-22**

- Two stores provided 34 hours and 54 minutes of luminosity
- Lithium Lens gradient voltage raised to 2600 volts
- C4 cold compressor replaced
- Timing jitter found on QF107 and QF12

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

**Announcements****[Have a safe day!](#)****U.S. visa application changes**

Average wait times for U.S. visas continue to lengthen. Administrative processing for U.S. visas now ranges between 45 to 60 days. The required security clearances for people working in science and technology caused the trend toward longer visa processing. These longer processing times will affect almost all Fermilab employees and foreign users seeking to visit Fermilab. As a result, visa applicants should provide all required paperwork. Check the U.S. Consulate's Web site prior to applying to find required paperwork. Do not rely on past experience - processes change. Notify the Visa Office if your application has been pending for four weeks. Also, employees should contact the Visa Office before making travel plans if you are contemplating applying for a U.S. visa abroad, whether for business or personal reasons. Employees also should advise the Travel Office of your visa application plans during the travel authorization process.

**Megafloods lecture Sept. 12**

Megafloods are the largest known freshwater floods with flows comparable in scale to ocean currents. They are capable of inducing global changes in climate. Fermilab Lecture Series will present a lecture on these floods by Dr. Victor Baker from the University of Arizona on Friday, Sept. 12, at 8 p.m. Tickets are \$5.

[More information.](#)

**AutoCAD classes offered in fall**

The Office for Professional and Organization Development will offer AutoCAD classes this fall. AutoCAD Fundamentals will take place either Sept. 9-11 or Sept. 22-24. [Learn more and enroll.](#) AutoCAD Intermediate will take

## Physicists 'see' single top quarks at the Tevatron

From *Physorg.com*, Aug. 22, 2008

*Scientists at the world's largest fully operating particle accelerator, the Tevatron at Fermi National Accelerator Laboratory (Fermilab) in Illinois, have discovered convincing evidence suggesting the existence of top quarks that are not coupled to their antiparticle, the antitop. These "single" top quarks have been hunted since Fermilab scientists first discovered top-antitop pairs in 1995.*

The results, published in a recent edition of Physical Review D, affirm and improve upon preliminary data published last year in Physical Review Letters, which pointed to the production of single top quarks but were not precise enough to claim true discovery.

[Read more](#)

place on Sept. 25-26. [Learn more and enroll.](#)

### **Blood Drive Aug. 26, 27**

Fermilab's next blood drive will take place from 8 a.m. - 2 p.m. on Aug. 26 and 27. Heartland Blood Centers will take donations in the Wilson Hall ground floor NE Training Room. To ensure enough BBQ sets and aprons are available for all who donate, appointments are encouraged, although walk-ins are welcome. Schedule appointments [online](#) or call Diana at x3771 or Margie at x5680.

### [Additional Activities](#)