

## Calendar

### Friday, February 4

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

**4:00 p.m.** Joint Experimental Theoretical Physics Seminar - 1 West

Speaker: B. Kayser, Fermilab

Title: APS Neutrino Study

**8:00 p.m.** Fermilab Public Lecture Series - Auditorium

P. Grannis of The State University of New York at Stony Brook presents:

Experiments at Fermilab: Understanding Matter at the Smallest Scale

Tickets: \$5

### Monday, February 7

**2:30 p.m.** Particle Astrophysics Semina - Curia II

Speaker: R. Scranton, University of Pittsburgh

Title: Cosmic Magnification with the SDSS

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

**4:00 p.m.** All Experimenters' Meeting - Curia II

Special Topic: Fermilab Power Distribution System

## Weather



Sunny 48°/30°

[Extended Forecast](#)

[Weather at Fermilab](#)

## Current Security Status

[Secou Level 3](#)

## New Training Will Advance Environmental Awareness



EMS team member Eric Mieland of ES&H-EPG surveys the tear-down of the old Neon Compressor Building in 2003. The contractor recycled about 85 percent of the material from the building, including concrete from the foundation, reducing costs for the lab and offering benefits for the environment. That sort of "re-thinking" is an important component of the lab's new Environmental Management System. (Click on image for larger version.)

Among the many ways that Fermilab employees interact with their environment is by generating 150 metric tons of paper waste each year — and that amount is going up all the time.

With the goal of reducing waste and pollution, and increasing environmental awareness, a new Environmental Management System (EMS) is being implemented by the lab, part of which includes a training program for all employees beginning Thursday, Feb. 10. The training session, about 40 minutes long, will feature "What You Re-Think Matters," a video presentation produced by Fermilab Visual Media Services. The presentation shows how to re-think your job with a focus on pollution prevention and waste minimization, including specific

## Main Injector Shows Benefits Of University Groups' Efforts

*This article is the fifth in a series that will focus on the benefits of Fermilab/University collaboration on different accelerator projects.*



Bill Foster (left), Alberto Marchionni, Phil Adamson and Hyejoo Kang of Stanford University with the digital damper system they worked on in MI60. (Click on image for larger version.)

The work of university students has had a significant impact on successes in many areas of operating the Main Injector.

"The students have a strong motivation," said Alberto Marchionni of Accelerator Division. "They want to improve the performance of their experiment, and it's that strong motivation that makes this work. With the Main Injector, students have worked on building a digital damper system, on beam studies, beam quality input, barrier RF stacking, and some work with flying wires."

Early contributors include graduate student Lorenzo Feligio from Boston University, now with DZero, who has been working with Ioanis Kourbanis on the analysis of the flying wire data during shots to the collider. Postdoc Phil Adamson from University College of

## Wilson Hall Cafe

### Friday, February 4

Old Fashioned Ham & Bean

Black & Blue Cheeseburger \$4.75

Chicken Wellington \$4.25

Tex-Mex Lasagna \$3.75

Roasted Veggie & Provolone Panini  
\$4.75

Pizza cacciatore \$2.75

Vegetarian Stir Fry \$4.75

The Wilson Hall Cafe now accepts Visa,  
Master Card, Discover and American  
Express at Cash Register #1.

[Wilson Hall Cafe Menu](#)

[Chez Leon](#) will be closed through January  
and February

## Search

Search the Fermilab Today Archive

## Info

Fermilab Today is online at:

<http://www.fnal.gov/today/>

Send comments and suggestions to

[today@fnal.gov](mailto:today@fnal.gov)

[Fermilab Today archive](#)

[Fermilab Today PDF Version](#)

[Fermilab Result of the Week archive](#)

[Fermilab Safety Tip of the Week archive](#)

[Linear Collider News archive](#)

[Fermilab Today classifieds](#)

[Subscribe/Unsubscribe to Fermilab Today](#)

suggestions from Roads and Grounds, Accelerator Division and Particle Physics Division. Sign-ups are available through the [TRAIN on-line database](#).

"There will be further training for individual employees depending on their job responsibilities," says EMS team member Paul Kesich of the ES&H Environmental Protection Group. "For example, management will receive specific training, and task managers and construction coordinators will get specific training. But this training session is for everyone."

Along with all other Department of Energy facilities, the lab is charged with having an EMS fully in place by Dec. 31, 2005. The DOE directive stems from Executive Order 13148, "Greening the Government Through Leadership in Environmental Management."

"Protecting the Fermilab environment is important to everyone," Kesich says, "and through the EMS, everyone at the lab can participate and have an impact."

## In the News

### From *The Beacon News*, February 3, 2005 SciTech struggles for money

By Dave Parro

AURORA — For the first time in its 15-year history, SciTech Hands-On Museum is facing a financial crisis that could threaten the future of the downtown cultural destination.

The children's science museum was notified by the state at the end of last year that it would not be receiving a grant for the first time since 2000, which will severely impact SciTech's \$1.2 million

London, now also part of the Main Injector Department, has worked with Marchionni, Bill Foster and Bill Ashmanskas on the Main Injector digital damper system. "The dampers are essential for running high intensity beam for MINOS," said Adamson. "It's exciting having worked on MINOS from the R&D stages being here working to increase the intensity for an almost running experiment. I'm learning new things and working with good people."

Caltech has been exploring a scheme to increase the protons deliverable to NuMI or the antiproton target. The idea is to squeeze ("stack") additional batches of protons from the Booster into the Main Injector using barrier RF buckets. The collaboration of Caltech, KEK, and Fermilab performed several promising tests in 2003-2004. Other contributors to the commissioning of the Main Injector for NuMI include the University of South Carolina, Benedictine University, University of Texas and Stanford University.

As Sacha Kopp of the University of Texas said: "Many people at Fermilab have bent over backwards to find time for mentoring students."

**Next: the Tevatron**

## Announcements

annual budget. To make up for the lack of federal and state grants that are increasingly more difficult to get, the museum is launching a fund-raising campaign.

Ronen Mir, SciTech's executive director, said the museum needs to raise \$250,000 by August to remain financially solvent. Otherwise, SciTech's future could be in doubt, he said.

[read more](#)

### **From *The Guardian*, February 3, 2005**

#### **In a 17-mile tunnel deep beneath the Earth, the search for the God particle**

by David Adam

The journey down in the lift lasts barely a minute, but is the closest thing on Earth to travelling into another dimension. At the bottom of the shaft is a well lit tunnel that stretches as far as the eye can see, until its barely perceptible curve takes it around a distant corner. This is no ordinary tunnel. It carries no trains or gas pipes and is built in a perfect circle, running for 17 miles about 100 metres below the western suburbs of Geneva, squeezed between the lake on one side and the imposing Jura mountains on the other.

[read more](#)

### **Fermilab Public Lecture Series Tonight**

Paul Grannis, of SUNY at Stony Brook, will present "Experiments at Fermilab: Understanding Matter at the Smallest Scale" on Friday, February 4 at 8:00 p.m. Tickets are \$5.00.

[more information](#)

### **Brian Greene Book Signing in Naperville**

On Tuesday, March 1, Brian Greene will present his latest title, "The Fabric of the Cosmos" at a special event at North Central College in Naperville. Fermilab's Scott Dodelson will moderate this free event, but reservations are required. Please call Anderson's Bookshop (630-355-2665) to make a reservation.

[more information](#)

### **New Classifieds Posted on Fermilab Today**

New [classified ads](#) have been posted on *Fermilab Today*. A permanent link to the classifieds is located in the bottom left corner of *Fermilab Today*.

### **[Upcoming Activities](#)**