

## Calendar

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

Friday, Sept. 18

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

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

Speaker: Paul Lujan,  
University of California,  
Berkeley

Title: Measurement of the Top  
Mass at CDF

Monday, Sept. 21

THERE WILL BE NO  
PARTICLE ASTROPHYSICS  
SEMINAR THIS WEEK

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

All Experimenters' Meeting -  
Curia II

Special Topic: Ni<sub>3</sub>Sn-Magnet

Construction Breakthrough

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

## Campaigns

### Take Five

### Tune IT Up

## Weather



Sunny  
77°/55°

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

## Current Security Status

### [Secon Level 3](#)

## Benefits announcement

### Temporary flu leave policy now available online

In an effort to make contingency plans for a widespread outbreak of the H1N1 flu, Fermilab in consultation with the Department of Energy has established a temporary policy and procedure for employees who:

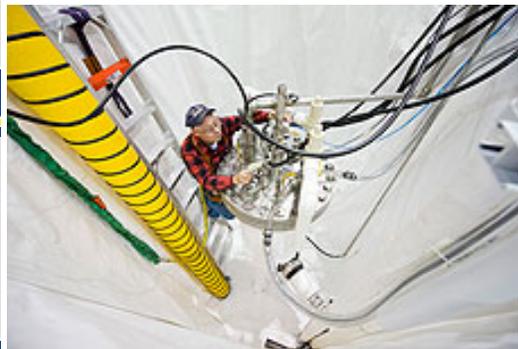
- need to take time off due to the flu and have few or no remaining sick days,
- need to take time off due to school closings,
- must care for family members who are ill with the flu.

These policy and procedure changes are effective immediately and remain in effect until further notice. Details and links to forms that need to be filled in to take leave can be found on this flu leave policy [Web site](#).

The policies and practices established in this temporary policy supplement those found in the regular Fermilab policies and procedures that deal with [sick leave](#) and [vacation](#).

## Feature

### Dark matter search moves forward with prototype test



[Bob Barger makes adjustments inside the COUPP experiment's tank, which contains a prototype detector that will eventually search for dark matter.](#)

COUPP scientists began filling Wednesday a prototype detector that they hope will eventually join other experiments in the search for dark matter.

The prototype is a larger version in a series of detectors that scientists began testing four years ago. The first in the series held one liter

## Recovery Act Feature

### Recovery Act funds high-availability computing center



[Gene Gozner \(front\) and Bruce Hosey \(back\), both of Cipher Ltd., work on the ducts that will eventually house high-voltage electric cable powering new computer equipment at the Feynman Computing Center.](#)

The American Recovery and Reinvestment Act is funding a \$4.5 million project to build a high-availability computing center and to improve electric infrastructure at the Feynman Computing Center.

The first of four construction packages for the two-year project, which began in August, will double the electric capacity at the computing center and install a backup electric generator and other electric hardware. FESS engineer Tim Trout, who is supervising construction, said crews have finished about a quarter of the first stage.

Fermilab hired Pandecon Construction, of Aurora, as the primary subcontractor for the project. Local sub-tier contractors will lay down cables and install the hardware that will eventually carry high-voltage electricity from the switchyard to a transformer outside of the Feynman Computing Center.

Yorkville resident Bruce Hosey, an electrician for Aurora-based Cipher Ltd., said the project will provide much-needed work.

## Wilson Hall Cafe

Friday, Sept. 18

- Old fashioned ham & bean
- Philly style chicken
- Chicken pot pie
- Baked fish over rice
- Roasted veggie & provolone panini
- Assorted sliced pizza
- Baked potatoes

[Wilson Hall Cafe menu](#)

## Chez Leon

Wednesday, Sept. 23

Lunch

- Stuffed filet of sole
- Green rice
- Steamed broccoli
- Apple turnovers

Thursday, Sept. 24

Dinner

- Closed

[Chez Leon menu](#)

Call x3524 to make your reservation.

## Archives

[Fermilab Today](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[User University Profiles](#)

[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)

Visit the Fermilab

[home page](#)

of target fluid, the next was two liters and this one is 30 liters.

The eventual goal is to deploy the new detector underground to join the worldwide search for dark matter by detecting weakly interacting massive particles, or WIMPs, which are one of the top candidates for dark matter. Before that happens, however, scientists want to monitor the device above ground for software glitches, image quality and potential engineering problems, a process that began Wednesday.

"We'd like to make sure it works before we move it underground," said Andrew Sonnenschein, project manager for Chicago Observatory for Underground Particle Physics. "We're trying to minimize the risks for when it is far away and inaccessible."

At 3 p.m., the COUPP project team began adjusting a series of valves that would allow a liquid called iodotrifluoromethane, or CF3I, to trickle into the transparent quartz jar that resembles a large test tube. CF3I is commonly used as a fire suppressant.

When a WIMP interacts with an atom in the pressurized and superheated CF3I liquid, the particle will trigger a small expanding bubble. The moment the experiment detects a bubble larger than 1 millimeter, the detector records a one-second video of the bubble.

Scientists will test the real chamber, which is made of higher-grade quartz, in the NuMI tunnel about 1,000 feet underground at Fermilab this winter, said Russ Rucinski, project engineer for COUPP. The higher-grade quartz will cut background interference.

COUPP scientists plan to eventually install the detector and other equipment more than a mile underground at SNOLAB in Sudbury, Ontario, in 2010. With the large detector shielded from cosmic rays deep underground and with a greater sensitivity than the one-liter prototype, scientists hope to extract a clear signal of WIMPs.

-- Chris Knight

[Tune IT Up](#)

"Business has been really slow," Hosey said. "There are other jobs, but it's very slim pickings."

Depending on the day, between two and six employees from construction company Don Bohr & Sons will work at the site to excavate, pour concrete and help install electrical hardware for the next few months.

"It's a medium-sized project, so it will keep some of our guys busy," said Dan Bohr, one of the owners of Don Bohr & Sons.

When first-stage work completes in January, construction crews will prepare an existing space on the third floor of the Feynman Computing Center to house 72 racks of new computer equipment.

FESS engineer Steve Dixon, who manages the project, said current electric limitations have limited growth at the computing center. The electric system improvements will address those limitations.

"Computing Division employees have already had to cut back on some of the work they were doing," Dixon said. "It's a needed upgrade."

CD's Gerald Bellendir and Adam Walters said the expansion would essentially double the power infrastructure of computing equipment at Feynman Computing Center.

-- Chris Knight

Visit Fermilab's [Recovery Act Web site](#).

## Special Announcement

### Wilson Hall domestic water service interruption Sunday

A domestic water service interruption that will affect Wilson Hall and Ramsey Auditorium will take place from 6 a.m. until 6 p.m. on Sunday, Sept. 20. Although Wilson Hall will not officially close during this outage, all restrooms will be closed and drinking fountains will be affected. Please plan accordingly.

## Special Announcement

## IMAP password reminder

If you have not already done so, please change your password for your IMAP e-mail account by the new extended deadline of the end of the day on Tuesday, Sept. 22.

If you have not reset your password since Aug. 18, you must reset it – even if your password is already at least 10 characters long. If you do not reset your password, you will not be able to log on to your e-mail account and will need to contact the Service Desk to re-enable your account.

The password must be at least 10 characters in length to fulfill DOE password complexity requirements.

A strong password will include a combination of letters, symbols and numbers. For instructions on how to change your IMAP password on the IMAP server and on clients such as Outlook and Entourage, see this [site](#).

Service Desk representatives will offer assistance at the Password Doctor booth in the Wilson Hall atrium during lunch hours on Monday and Tuesday. They are also available during business hours at the Service Desk and at x2345. Please bring your Fermilab identification to the booth or Service Desk.

### In the News

## Local small businesses make contacts

From *Daily Herald*, Sept. 17, 2009

**Editor's note:** Bob Johnson of Fermilab's Procurement Department is featured in this article.

They sat at tiny bistro tables, just the two of them.

They talked about what they do. They exchanged phone numbers.

And they were in a room with hundreds of others, all doing the same thing.

About 450 small business owners, including many from area suburbs, gathered Wednesday in Rosemont for Business Matchmaking, a type of speed-dating event for small companies seeking contracts with state and federal government agencies, including the U.S. Defense Department, Commerce Department, Homeland Security and Veterans Affairs. Others included Argonne National

## Buffalo Fest today



From 4 to 6 p.m. Friday, Sept. 18, the Users' Center will host Buffalo Fest on its patio. Half-pound buffalo burgers are \$6; half-pound hamburgers are \$5; and quarter-pound beef hot dogs are \$3. All sandwiches come with chips. No Fermilab buffalo were harmed for this festival.

### Announcements

#### Latest Announcements

[NALWO - Annual Autumn Potluck Luncheon - Oct. 2](#)

[Prairie Seed Harvest Oct. 3](#)

[S&T Policy: A View from Washington, D.C. - today](#)

[Mosaico Hispanico - celebrating Hispanic music and dance - Sept. 19](#)

[Wilson Hall domestic water service interruption - Sept. 20](#)

[English Country Dancing - Sept. 20](#)

[Fermi Kyuki-Do martial arts - next session begins on Sept. 21](#)

[Argentine Tango through Sept. 30](#)

[Bowlers wanted Wednesday nights](#)

[Thai Village restaurant discount](#)

[Tai Chi class moves to Thursdays](#)

[New Lo Cardio Class - Sept. 14 - Nov. 16](#)

[New Tai Chi For Health class - Sept. 14 - Nov. 16](#)

[URA Visiting Scholars Program now accepting applications](#)

[Six Flags Great America discount tickets](#)

Laboratory in DuPage County, Fermi National Accelerator Laboratory in Batavia, and Navistar Inc. of Warrenville.

[Read more](#)

[Sign up for fall Science Adventures classes](#)

[Office 2007 New Features class offered in September](#)

[Buttered Rum performs on Fermilab Arts Series Oct. 24](#)

[Fred Garbo Inflatable Theatre - at Fermilab Arts Series - Nov. 7](#)

[Process piping \(ASME B31.3\) class offered in October and November](#)

["The Night Before Christmas Carol" at Fermilab Arts Series - Dec. 5](#)

[Additional Activities](#)

[Submit an announcement](#)

Classifieds

Find new [classified ads](#) on *Fermilab Today*.