

Furlough Information

Reminder:

An IDES representative will conduct the final on-site group meeting at 11 a.m. and noon in the Wilson Hall One West conference room on Friday, March 28.

New furlough information, including an [up-to-date Q&A](#) section, appears on the [furlough Web pages](#) daily.

Layoff Information

New information on Fermilab layoffs, including an [up-to-date Q&A](#) section, appears on the [layoff Web pages](#) daily.

Calendar

Friday, March 28

9 a.m. [Presentations to the Physics Advisory Committee](#) - Curia II

3:30 p.m.

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

4 p.m.

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

Speaker: T. Junk, Fermilab
Title: Measurement of Single Top Quark Production with CDF

8 p.m.

[Fermilab Lecture Series](#) -

Auditorium

Speaker: Dr. Daphne Fautin,
University of Kansas

Title: [Census of Marine Life:](#)

[How Many Fish, Sea](#)

[Anemones, and Clams Live in the Ocean and Where Do They Live?](#)

Tickets: \$5

Monday, March 31

THERE WILL BE NO
PARTICLE ASTROPHYSICS

Feature

Turn off lights for Earth Hour, reduce energy use every day



Fermilab will shut off all nonessential lights in Wilson Hall between 8-9 p.m. Saturday as part of Earth Hour.

without light Saturday night.

Please remember that in Wilson Hall, and some other buildings, all nonessential lights will shut off on Saturday at 8 p.m. If you need to work during that time, turn on necessary lights. Shut them off before you leave.

Shutting off lights for an hour is symbolic. But it won't take living in constant darkness to make a difference in the fight against global warming. Here are some tips for reducing energy and resource use at work and at home.

At work:

- Check your space. Before leaving for the night, remember to turn off your computer and any lights in your workspace.
- Unplug devices. Unplug cell phone or laptop chargers when not in use.
- Print smart. Print double-sided to reduce paper consumption. When printing e-mails, print only the pages you need, or copy only the needed sections into a text document and print that.

At home:

- Change your lighting. Switching to compact fluorescent light bulbs will help save money and reduce emissions. These type of bulbs use 75 percent less energy than an equivalent incandescent bulb.

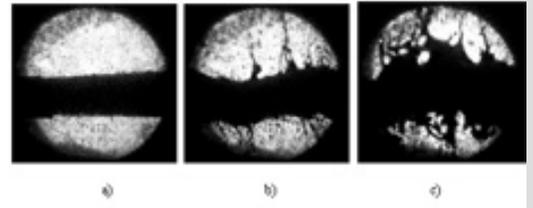
Join Fermilab and thousands of organizations, businesses and individuals around the world and shut off lights on Saturday night between 8 and 9 p.m. [Fermilab will participate](#)

in [Earth Hour](#), a global movement that hopes to deliver a powerful message about the need for action on global warming by coordinating an hour

without light Saturday night.

Special Result of the Week

Toward a high-intensity muon source



Impact of a single pulse of 12×10^{12} protons at 14 GeV on a 1cm-wide jet of mercury flowing at 15m/s in a 10T solenoid field: a) at the moment of impact (T=0); b) 9ms after impact; c) 15ms after impact.

To solve the mysteries of nature, physicists operate accelerators that deliver beams of particles including electrons, positrons, protons, neutrons, photons, neutrinos and nuclei. Particle physicists would like to add a muon accelerator to their list.

Results obtained with the Mercury Intense Target experiment show that this might be possible.

Muons are short-lived particles that are 200 times heavier than electrons. Physicists create muons by smashing a beam of protons into a solid or liquid target. The collisions of protons with atomic nuclei produce pions that decay within a fraction of a second to yield muons.

One of the key challenges for building a muon accelerator is the construction of an intense muon source. To be successful, scientists must build a source that consistently produces a large number of muons without destroying the target. They also must develop a strong magnet that channels these pions into a specific direction before they decay.

In November, physicists working on the MERIT experiment successfully tested a muon source concept developed by the DOE-supported Neutrino Factory and Muon Collider Collaboration. The NFMCC collaboration, which includes scientists from 41 institutions, proposed a target that consists of a free-liquid mercury jet flowing at 20m/s within the confines of a 20T solenoid field. The pions are produced by an intense proton beam that hits the jet with a beam spot size of a few millimeters.

SEMINAR THIS WEEK**3:30 p.m.**

DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
4 p.m.

All Experimenters' Meeting -
Curia II
Special Topics: RF Spoke
Cavity Tests; MuCool RF
Program

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

Weather

Sunny 41°/20°

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

Current Security Status[Secon Level 3](#)**Wilson Hall Cafe****Friday, March 28**

- Old fashioned ham & bean
- Philly style chicken
- Braised pork chops
- Smart cuisine
- Baked fish over rice
- Roasted veggie & provolone panini
- Assorted pizza slices
- Baked potato
- ***Carb Restricted Alternative**

[Wilson Hall Cafe Menu](#)**Chez Leon****Wednesday, April 2
Lunch**

- Enchilada de pollo
- Ensalada Mexicana
- Pineapple flan

**Thursday, April 3
Dinner**

- French onion soup
- Fillet mignon de pinot noir sauce
- Roasted baby potatoes w/ garlic & rosemary
- Sautéed green beans
- Chocolate soufflé w/ frangelico crème anglais

- Rethink your laundry. Wash clothes on cold to save energy required to heat water. If possible, dry clothes on a clothesline.
- Take quicker showers. By spending one minute less in the shower, you'll save water and electricity.
- Turn off appliances, electronics and lights that aren't in use. When you leave a room, turn off any electronic devices not currently in use.

Feature**W.K.H. Panofsky: A symposium celebrating Pief**

W.K.H. "Pief" Panofsky

Few would dispute the far-ranging scientific and political impact of W.K.H. "Pief" Panofsky's professional achievements. A renowned particle physicist, founder of SLAC, indefatigable arms-control advocate and advisor to U.S. presidents and world leaders, Pief's achievements over the course of his long life have left a legacy of immeasurable proportions.

The remarkable professional life of Pief Panofsky is the subject of a day-long symposium that will feature a series of speakers who will summarize Pief's achievements as a scientist and humanitarian. The event will take place on Thursday, April 10, 2008, in the Arrillaga Alumni Center on the Stanford campus. The Panofsky Auditorium at SLAC is the secondary venue to which all presentations and discussion periods will be simultaneously broadcast.

Please register in advance if you plan to attend any or all of the lectures. To register for the symposium program, please visit the event [Web site](#) before April 7, 2008.

All registered attendees are welcome at the 5:30 p.m. reception that closes out the day at Arrillaga.

From ISTGW

The heat deposited in the mercury jet corresponds to the energy emitted by hundreds of 1kW heaters in a space that is 1cm in diameter and 30cm long. Can the jet survive this heat?

Using the Proton Synchrotron at CERN, the Mercury Intense Target collaboration demonstrated that the jet could, in principle, withstand a proton beam of up to 4MW power.



Left to right, seated: Hugo Pereira, CERN; Harold Kirk, BNL. Left to right, standing: Chris Densham, RAL; HeeJin Park, BNL (obscured); Peter Loveridge, RAL; Roger Bennett, RAL; and Kirk McDonald, Princeton. *Image courtesy of Robert B. Palmer.*

[Read more](#)[Result of the Week Archive](#)**In the News****Bad news/good news: Congress takes first steps in FY 2009 appropriations cycle**

From *AIP FYI*,
March 27, 2008

The House and Senate have taken their first steps in the FY 2009 appropriations cycle. While the initial targets for proposed science funding are very favorable, the overall picture is considerably more troubled. As they did last year, the House and Senate are on a pathway to spend more for discretionary programs than what President Bush has proposed, setting up what will in all likelihood be another series of presidential vetoes and an unfavorable appropriations outcome.

The process of determining a budget resolution - a nonbinding congressional spending and taxing "blueprint" - is something that would appear to matter only to those working on Capitol Hill. It matters. The

[Chez Leon Menu](#)

Call x4598 to make your reservation.

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Fermilab Today is online at:
www.fnal.gov/today/

Send comments and suggestions to:
today@fnal.gov

Our powers combined: gLite, Globus and Unicore play ball



The OMII-Europe team will celebrate the close of the project's first phase in late April by releasing five interoperable software components that will give scientists the ability to combine the middleware powers of gLite, Globus and Unicore. *Images courtesy of Sergio Andreozzi*

Connectivity and sharing lie at the heart of grid technology, yet ironically, the grid world can be a lonely place for a scientist.

Researchers are limited to the storage, databases and processing power made available by their own particular grid middleware.

This means each grid platform becomes the equivalent of an independent city-state. If you've ever felt the need to tunnel under your own city to visit other middleware dominions, then you'll be interested in some new software that can let you do just that.

In late April, OMII-Europe will celebrate the close of its first phase by releasing five interoperable software components that allow grid users to work across Europe's major grid platforms: gLite, Globus and Unicore.

[Read more](#)

-- Danielle Venton, EGEE

additional \$22 - \$23 billion for discretionary spending that Congress wanted to spend last year, and President Bush's refusal to spend any more than what he had originally requested resulted in an almost three-month delay in the final passage of the FY 2008 appropriations legislation.

[Read more](#)

[Announcements](#)[Have a safe day!](#)**IDES representative on site Friday**

A representative from Illinois Department of Employment Security will be on site in the Wilson Hall One West conference room for the last on site visit Friday, March 28. Due to the increase in attendance, two larger group meetings will occur at 11 a.m. and 12 p.m. If you are beginning your furlough week, please fill out a benefit application on site. You may also apply for benefits [online](#) or at your local IDES office the week you are on furlough. Please contact [Heather Sidman](#) x3326 or [Jeannelle Smith](#) x4367 with questions.

SciTech summer camps

The SciTech Hands-on Museum offers Science Adventure Camps for children age 6-8 and age 9+. Week-long camps begin on June 23 and run from 9 a.m. to 3 p.m. Fees range from \$200 to \$225 per week. Before- and after-care is available for an extra fee. For more information, visit the [SciTech Web site](#).

DreamWeaver CS3: Advanced

Web site developers, Web site designers, marketing managers, Web graphic artists and Web site administrators can take an advanced class in DreamWeaver CS3. [Learn more and enroll](#)

Classifieds

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

[Additional Activities](#)