

## Furlough Information

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, June 6

THERE WILL BE NO DIRECTOR'S COFFEE BREAK TODAY

4 p.m.

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

Speaker: P. Nadolsky, Michigan State University  
Title: Parton Distributions for the LHC Era

8:30 a.m. - 6:30 p.m.

[3rd Workshop on Physics with a high intensity proton source](#) - One West

### Monday, June 9

2:30 p.m.

[Particle Astrophysics Seminar](#)

- Curia II

Speaker: M. Truch, University of Pennsylvania

Title: The Balloon-borne Large Aperture Submillimeter Telescope - BLAST

3:30 p.m.

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

4 p.m.

All Experimenters' Meeting - Curia II

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

## Weather

## Special Announcement

### Voluntary separation information update

The Department of Energy has approved the voluntary separation program for Fermilab. Information packages will go out to selected employees who will be offered this option on Monday, June 9. The packages will go out via e-mail. If the selected employee does not have an e-mail account, the employee will receive a hard copy. Employees who have not been selected for the program will not receive notification.

## Feature

### Fermilab users consider opportunity, challenges



Joseph Dehmer, director of the division of physics of National Science Foundation, addresses attendees of the Users' Meeting.

The final day of the Users' Meeting set a course to discovery with an eye to the energy, intensity and cosmic frontiers of particle physics at Fermilab.

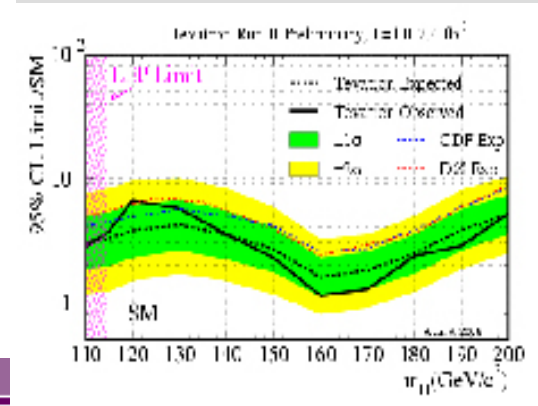
But the course presents budget and outreach hurdles.

"It is very important not to be discouraged by the past," said Joseph Dehmer, director of the division of physics of National Science Foundation. "I think we'll have good coming years. The opportunity for discovery is greater than it has ever been at any time in history."

Hundreds of users attended talks about Tevatron advances and

## From iSGTW

### Friendly but fierce competition for the Higgs



This diagram plots the limit (at 95 percent confidence level) of Higgs production (y-axis) for different possible Higgs masses (x-axis). Each mark along the y-axis is a multiple of the Standard Model rate of Higgs production, and this rate is shown as a straight line at "1." The more data Fermilab scientists collect, the closer their observed limits will get to the Standard Model rate. Notice that the "observed" line comes vertically closest to 1, the Standard Model rate, at 160 on the x-axis. Fermilab physicists have amassed nearly enough data to make a statement about whether the Higgs exists at the mass value 160 GeV/c<sup>2</sup>.

*Image courtesy of the Tevatron New Phenomena & Higgs Working Group on behalf of CDF and DZero.*

The two Tevatron experiments at Fermilab, CDF and DZero, have nearly ruled out the hoped for mass value for the Higgs boson—the particle regarded by some as one of the last big mysteries of the universe. Its discovery could help explain dark matter, dark energy and why particles have mass.

The Higgs search provides sufficient motivation for these competitors to combine their analyses and go against a tradition of friendly rivalry. Teams from each experiment run simulations on the Open Science Grid and compare their models to actual data. The process of combining results is a significant analysis in itself. The scientists must account for the unique uncertainties in each component of their different detectors.

"You don't want one group to say they've discovered the Higgs and, using the same

 **Severe Thunderstorms**  
88°/68°

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

[Current Security Status](#)

[Secon Level 3](#)

[Wilson Hall Cafe](#)

### Friday, June 6

- Italian vegetable soup
- Portobello mushroom melt
- Southern fried chicken
- Mediterranean baked tilapia
- Eggplant parmesan panini
- Assorted slice pizza
- Assorted sub sandwich

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

### Wednesday, June 11

#### Lunch

- Parmesan crusted chicken
- Roasted potatoes w/ garlic and rosemary
- Vegetables of the season
- Blueberry tart w/ vanilla ice cream

### Thursday, June 12

#### Dinner

- Closed

[Chez Leon Menu](#)

Call x4598 to make your reservation.

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P5 Chair Charlie Baltay

field, including experiments at the energy frontier, neutrino science, dark energy and dark matter searches and R&D on a high-intensity proton beam.

U.S. Congressman Bill Foster, a 22-year-veteran of Fermilab, urged users to attend the third Workshop on Physics to plan experiments that would meet short-and mid-term research goals.

"Don't be afraid to try something new," he said.

A culture of that supports only short-term projects has hurt particle physics, Foster said, but the recent Senate approval of a supplemental funding bill and public interest in keeping the country competitive offer hope.

"Across the political spectrum there is recognition of the need for basic research," he added. "The problem is keeping the politicians focused."

Washington policy makers repeatedly stressed that particle physicists must make the case for the benefits of particle physics to the nation's health, security and economic well being.

"Advances in technology are not steady, but when it happens, it can change civilization," Dehmer said. "Particle physicists are the most fearlessly creative group of people I know. They push the frontiers of technology and social organization."

-- Tona Kunz

analysis, proposed neutrino experiments and the U.S. participation in CMS at the LHC. Particle Physics Project Prioritization Panel (P5) chair and Yale professor Charlie Baltay presented the subpanel's report, which laid out three roadmaps contingent on varying funding scenarios. The panel identified priorities for the

data, the other group to say it's background," says CDF physicist Tom Junk. "That would be embarrassing."

Sharing hard-earned data requires trust.

"We spend almost the entire year dug down in our trenches, staring across at each other," says DZero's Wade Fisher. "Now we're giving them our data, saying, 'Here, open up the hood and poke around the engine a bit'."

-- Jennifer Lauren Lee, Fermilab

[Read more](#)

## Announcements

[Have a safe day!](#)

### Heart risk screening June 10

Wellness Works and Delnor-Community Hospital will offer a heart risk screening on Tuesday, June 10. The assessment will take place by scheduled appointment between 6:30 a.m. and 10:45 a.m. for Fermilab employees in the EOC on the ground floor of Wilson Hall. Those interested can sign up on the [ES&H Web page](#). Participants must fast for 12 hours but can drink water.

### June 6 deadline for The University of Chicago Tuition Remission Program

The deadline for applying for the tuition remission program at The University of Chicago for the Summer 2008 quarter is June 6. For more information and enrollment forms, contact Nicole Gee at x3697 or visit the [Web site](#).

### NALWO sponsors wildlife talk

Fermilab's women's organization NALWO will sponsor "Wildlife on the Prairie," a talk by lead groundskeeper Jim Kalina at 10 a.m. on Thursday, June 12. Kalina will share stories about coyotes, deer, American bison and other wildlife that have made their homes here at Fermilab. The informal talk will take place near the picnic tables at Kuhn Barn or inside the Barn if it rains. Anyone can attend. Please show photo ID to enter the laboratory.

### NALWO lunch June 11

Join Fermilab's women's organization NALWO for a get-together lunch at noon on Wednesday, June 11, at Chez Leon. Meet other Lab women, network, or just relax over a delicious meal. The event costs \$14 and the menu includes parmesan crusted chicken, roasted potatoes with garlic and rosemary, vegetables of the season and a blueberry tart

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)

## Tech magnate donates another \$50 million to Canada's Perimeter Institute

Mike Lazaridis, who made a fortune developing the BlackBerry handheld device, is donating another \$50 million to the Perimeter Institute for Theoretical Physics in



Canada. That's on top of the \$100 million in personal funds he put up to found the institute in 2000. The gift will allow Perimeter to continue its current rate of expansion without drawing down its endowment. The donation was announced this evening to a crowd gathered for a public lecture at a high school near the institute.

"At Perimeter we don't do any experiments," Lazaridis said by phone from the institute. "So our costs are basically room and board, chalk, a computer system and access to libraries, and a travel budget for conferences and collaborations. What's happened is that Perimeter has become well-recognized globally, and we have a lot more people desiring to come here and work and collaborate with our staff, so we've had to accelerate our expansion plans."

-- *Glennnda Chui*

[Read more](#)

w/ vanilla ice cream. Please respond to [Marjorie Appel](#) or call her at (630) 293-9349 by Friday, June 6, so she can make the reservations at Chez Leon.

### Classifieds

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

### [Additional Activities](#)