

## Layoff Information

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

## Furlough Information

Information on the furloughs at Fermilab, which stopped May 31, 2008, is available on the [furlough Web pages](#).

## Calendar

### Wednesday, June 18

**3:30 p.m.**  
DIRECTOR'S COFFEE  
BREAK - 2nd Flr X-Over  
**4 p.m.**

[Fermilab Colloquium](#) - One

West  
Speaker: F. Danuso, University  
of Udine

Title: Knowledge Integration to  
Make Decisions About  
Complex Systems:  
Sustainability of Energy  
Production from Agriculture

### Thursday, June 19

THERE WILL BE NO  
PHYSICS AND DETECTOR  
SEMINAR THIS WEEK  
**2:30 p.m.**

[Theoretical Physics Seminar](#) -  
Curia II

Speaker: S. Nandi, Oklahoma  
State University

Title: A New Two Higgs  
Doublet Model

**3:30 p.m.**  
DIRECTOR'S COFFEE  
BREAK - 2nd Flr X-Over  
**4 p.m.**

[Accelerator Physics and  
Technology Seminar](#) - One

West  
Speaker: A. Hahn, Fermilab  
Title: Statistical Data Analysis  
(Part II)

[Click here](#) for NALCAL,

## Feature

### Critter-gitter explains how Fermilab balances wildlife



Jim Kalina shares wildlife tips in a NALWO-sponsored talk on June 12.

A call went out over the Fermilab radio. Two bucks had locked antlers in a duel to the death. It didn't end there. The victor was locked to his opponent's carcass.

Jim Kalina rushed to the scene. Using a bow saw he cut the struggling buck free. Ever since, Kalina has been known at Fermilab as the expert "critter-gitter."

In a talk sponsored by NALWO on Thursday, Kalina related this and many other Fermilab wildlife encounters to a group of about 25 wide-eyed children and Fermilab employees.

As lead groundskeeper for more than 30 years, Kalina has been a helper to wildlife who have found themselves entangled in Fermilab's electrical system, displaced by new facilities and struck by speeding cars.

In the winter, snakes, mice and raccoons looking for a warm spot to nap find their way into the power grid and laboratory basements. "This can result in expensive power failures and some very frightened people," Kalina said. He has removed snakes from rafters, skunks from basements and dead fish from the drain at the main ring.

As a kind of mediator between wildlife and the laboratory, Kalina also works to keep animals out of trouble by teaching people how to coexist with them. He points out that many animal situations are caused by people's negligence. It helps if drivers slow down,

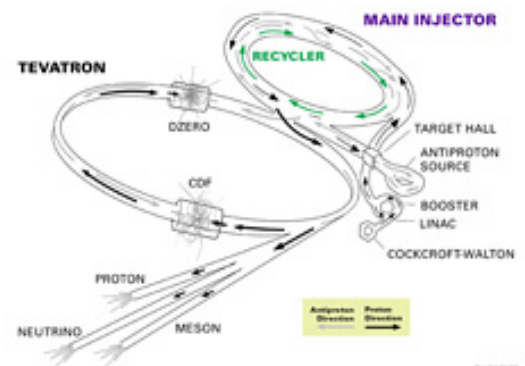
## From the Divisions/Sections/Centers

[This week's column](#), written by Kay Van Vreede, appeared in Monday's issue because of its timely content. Her column provided information on the voluntary layoffs.

## Feature

### Accelerators, DZero tune up for discoveries

#### FERMILAB'S ACCELERATOR CHAIN



[A diagram of Fermilab's accelerator chain](#)

If the Tevatron were a race car, its pit crew would have it purring like a kitten and leaving competition in the dust.

The accelerator has hit the stage where major upgrades are finished and experimenters are reaping the benefits of those upgrades and ongoing operations improvements. Key advances in beam efficiency include improving the mechanics of transferring beam to the Recycler and increasing the average stacking rate for antiprotons 25 percent from  $20 \times 10^{10}$  to  $25 \times 10^{10}$  per hour.

The harvest from these innovations has been bountiful. The Antiproton Source sets records almost every week. The Tevatron delivers beam at record rates and luminosity, the number of collisions, received by CDF and DZero has never been better. The Tevatron delivered 221 inverse picobarns in May, surpassing the previous monthly delivered record by 33 percent. Speeding up the Recycler antiproton mining and extraction has reduced the time to create a store from two hours to one hour and 45 minutes. The antiproton stacking down times caused by transfers to the Accumulator and Recycler

a weekly calendar with links to additional information.

## Weather



Mostly sunny  
75°/54°

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

## Current Security Status

[Secou Level 3](#)

## Wilson Hall Cafe

### Wednesday, June 18

- Beef barley
- Fish & chips
- Smart cuisine: Caribbean grill salmon
- Country fried steak w/pepper gravy
- Beef & cheddar panini w/ sauteed onions
- Assorted slice pizza
- Cavatappi pasta w/Italian sausage & tomato ragu

[Wilson Hall Cafe Menu](#)

## Chez Leon

### Wednesday, June 18 Lunch

- Assortment of quiches
- Salad of field greens with raspberry vinaigrette
- Apple walnut cake w/ cream Chantilly

### Thursday, June 19 Dinner

- Melon & prosciutto
- Grilled duck breast w/ Zinfandel fig sauce
- Wild rice w/ pecans and currants
- Sautéed green beans
- Lemon Napoleons

[Chez Leon Menu](#)

Call x4598 to make your reservation.

## Archives

managers secure buildings and people don't feed wild animals.

"The animals were here before us and they serve a purpose," Kalina said.

Predators such as the falcon, hawk and coyote help maintain the ecosystem naturally by reducing overpopulated wildlife sectors. "Coyotes might make people nervous, but we need them here and we should respect them," Kalina said.

-- *Jenny Johnson*

## In the News

### British satirist Chris Morris talks physics at CERN

From *New Scientist* blogs, June 13, 2008

With the world's most powerful particle smasher due to switch on later this year at CERN, the European centre for particle physics near Geneva, it's no surprise that websites are buzzing with speculation about the exotic particles it might discover. But it's curious to hear it coming from notorious English satirist Chris Morris.

Morris has fronted UK TV programmes such as *The Day Today*, a send-up of news programmes, and the controversial spoof documentary series *Brass Eye*, in which Morris hoodwinked unwitting celebrities into bogus campaigns (see a clip [here](#)). But at [cernpodcast.com](#), a website run by particle physicist Brian Cox, you can listen to Morris having a serious discussion about particle physics with Cox and two other physicists, Thorsten Wengler and Albert De Roeck, during a visit to CERN.

It turns out that Morris and Cox have been friends for several years, and Cox invited Morris to CERN to take a look around. In their podcast, Morris asks simple questions about particle physics and the speed of light, and the physicists give chatty and pleasantly unrehearsed answers.

[Read more](#)

## In the News

have dropped from 30 minutes to less than 2 minutes. On June 3 the complex achieved a record, a new antiproton stacking rate of 27.01 x10<sup>10</sup> per hour.

DZero also set a record for monthly efficiency in May at 92.2 percent, equating to a record 204 inverse picobarns of recorded collisions thanks to the hard work of detector and AD crews despite the manpower shortages caused by furloughs, said DZero leaders in a message to collaborators.

Yet AD members don't plan to rest on their laurels. Future plans include increasing slip-stacking to reach 400KW in the Main Injector, maximizing luminosity, improving reliability in the Linac through refinements to the low-level RF system and finding ways to squeeze in additional antiproton stacking.

Ideally, this continued effort will increase luminosity to CDF and DZero to between 7.2 inverse femtobarns and 8.6 inverse femtobarns by the end of FY2010 from the current level of 4 inverse femtobarns, said Ron Moore, of Fermilab's Accelerator Division, in a presentation to users this month.

"Now it's time to just run, run, run.....," he added.

-- *Tona Kunz*

## Safety Update

### ES&H weekly report, June 17

This week's safety report, compiled by the Fermilab ES&H section, lists three minor, non-recordable incidents. Fermilab employees and contractors have worked 73 days without a recordable injury. Find the full report [here](#).

[Safety report archive](#)

## Announcements

### Have a safe day!

### Career decision-making seminar available June 18

For those eligible for the voluntary layoff program, please consider attending a [Career Decision Making seminar](#) conducted by the career transition firm Lee Hecht Harrison. Register for sessions at 1 p.m. today or at 8:30 a.m. and 1 p.m. on June 18. Questions? Send e-mail to [wdrs\\_voluntary@fnal.gov](mailto:wdrs_voluntary@fnal.gov).

### Blood drive June 24, 25

Heartland Blood Centers will conduct a

[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)

## Sun might hold secret of dark matter

From *USA Today*, June 17, 2008

The identity of the mysterious dark matter thought to pervade the universe has eluded astrophysicists for decades. Now, for the first time a team hopes to look inside the sun for one of the prime candidates.

The invisible stuff called dark matter is thought to make up as much as 90 percent of the universe's matter. To date, astrophysicists have only inferred the existence of some mysterious substance by identifying its gravitational effects on visible matter such as stars and galaxies. (For instance, dark matter makes galaxies spin faster than otherwise expected.)

Two hypothetical particles have become the prime suspects to explain the fundamental make-up of dark matter: so-called axions and WIMPs (Weakly Interacting Massive Particles). Tens of teams are on the hunt for the heavyweight WIMPs, such as the GLAST team, which hopes to detect the gamma rays produced when, hypothetically, WIMPs and their antimatter selves annihilate each other.

[Read more](#)

Fermilab Blood Drive on June 24 and 25 from 8:30 a.m to 2 p.m. in the Wilson Hall Ground Floor NE Training Room. Schedule appointments [online](#) or call Diana at x3771 or Margie at x5680. [More information](#). The last blood drive collected 83 units. Many thanks to all who donated.

### Visa Office Closed

The Visa Office will be closed the week of June 23-27, 2008. Please address only urgent matters during that week to Borys Jurkiw at [visaoffice@fnal.gov](mailto:visaoffice@fnal.gov) or x4363.

### Fermilab pool opening

Members of Fermilab's Directorate are working with a pool committee to open the Fermilab pool this summer. The committee members hope to have the pool open by the end of June. Additional details will be published in *Fermilab Today* and in an e-mail sent to the Fermilab users.

### [Additional Activities](#)