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Furlough Information

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

Layoff Information

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

Calendar

Tuesday, Mar. 18
3:30 p.m.

DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
THERE WILL BE NO
ACCELERATOR PHYSICS
AND TECHNOLOGY
SEMINAR TODAY

Wednesday, March 19
2-3:30 p.m.
[Central Unix Web Service](#)
[Town Meeting](#) - One West

3:30 p.m.

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

[Fermilab Colloquium](#) - One

West

Speaker: J. Mastrianni,
University of Chicago
Title: Prions: Misfolded
Proteins and Fatal
Transmissible
Neurodegenerative Diseases

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

Weather

 **Chance of rain 44°/33°**

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

Current Security Status

Milestone

Tevatron sets new luminosity records



The Tevatron set records for peak and integrated luminosity.

On Monday morning at 6:01 a.m., the Tevatron entered a new era of performance. The collider produced more particle collisions per second than ever before. It achieved a record peak luminosity of $3.15 \text{ E}32 \text{ cm}^{-2}\text{sec}^{-1}$, breaking the barrier of $3\text{E}32$ for the first time. A few days earlier, the Tevatron produced a peak luminosity of $2.85\text{E}32$, the second-best store.

The record came on the heels of a week that had seven stores with peak luminosities between 2.36 and $2.85\text{E}32$. Combined, last week's stores yielded the largest number of proton-antiproton collisions ever produced in a single week. The total integrated luminosity for the week reached 46.5 inverse picobarns.

"This was just a great week," said AD's Dan Johnson as he presented the numbers at the All Experimenter's meeting on Monday afternoon. "It was a week you'd like to see: stacking and stashing. All accelerators performed well and it all came together. Lots of people contributed to this success, making plans, tuning the machines, performing studies and maintenance, making repairs and keeping all the systems operational."

For the past couple of months, the Antiproton Source set stacking records, producing record numbers of antiprotons and transferring stashes of them to the Recycler storage ring. But the rest of the accelerator complex did not yet perform at its best. Last week, everything came together. With no major equipment failures, plenty of antiprotons and quick

Director's Corner

Director Pier Oddone is on furlough. The column will resume next week.

Clarification

Solenoid vs. toroid: magnet explanation

Lithium Lens Focusing



AD's Dave McGinnis explains the difference between solenoidal and toroidal magnets and fields.

In last week's Director's Corner, the magnet field of the lithium lens used in the Antiproton Source was described as solenoidal. The lithium lens actually uses a toroidal magnet, which produces a field that focuses wayward beamline particles back to the beamline. To get a better understanding of the two magnets and the fields they create, we asked AD's Dave McGinnis about the difference. Watch McGinnis' explanation in a 2 1/2 minute [YouTube video](#).

In the News

[Secon Level 3](#)**Wilson Hall Cafe****Tuesday, March 18**

- Chicken & rice soup
- Low carb burger
- Baked meatloaf w/gravy
- Smart Cuisine: salmon provencal
- Peppercorn beef
- Assorted pizza slices
- Chipotle chili & queso nachos supreme

[Wilson Hall Cafe Menu](#)**Chez Leon****Wednesday, March 19 Lunch**

- Trout almondine
- Lemon scented rice
- Vegetable of the season
- Amaretto cheesecake

Thursday, March 20 Dinner

- Seviche
- Paella
- Watercress, oranges & red onion salad
- Brazo de gitano

[Chez Leon Menu](#)

Call x4598 to make your reservation.

Archives[Fermilab Today](#)[Result of the Week](#)[Safety Tip of the Week](#)[ILC NewsLine](#)**Info**

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turnaround times between Tevatron stores, the accelerator complex racked up more collisions than ever before.

Steve Holmes, associate director for accelerators, and Joanna Livengood, manager of the DOE Fermi Site Office, congratulated the Accelerator Division and everybody who contributed to this success.

--Kurt Riesselmann

Photo of the Day**Congressional fellow learns about Fermilab site, programs**

Steve Traver (right), congressional fellow for Steve Pearch (R-NM), learns about the Main Control Room from AD Operations employee Brian Schupbach and department head Roger Dixon. During his visit to the laboratory Friday, March 14, Traver met with Director Pier Oddone, AD department members, US CMS's Erik Gottschalk, CMS Communicator Elizabeth Clements and Neutron Therapy's Thomas Knox. He toured the Linac, Remote Operations Center, 15th floor and the Neutron Therapy Facility.

In the News**Science group boils down need for breakthroughs**

From *Chicago Tribune*,
March 17, 2008

For people raised on the Web and instant gratification, where gadgets go from must-have to old stuff in half a year, Robert Rosner has some news: The interval from a science breakthrough to commercial viability is measured in decades, not months.

Computers were around for 30 years before they became useful to business, and solid-state electronics consumer products didn't catch on until a generation after the transistor was discovered, said Rosner, director of

Durbin urges emergency fund grants for Fermilab

From *Beacon News*,
March 18, 2008

U.S. Sen. Dick Durbin joined a group of his colleagues from both parties in asking the Senate Appropriations Committee for more money for scientific research.

In a letter to the committee's chairman, Robert C. Byrd, Durbin and his colleagues requested an additional \$250 million for the Department of Energy's Office of Science, and \$100 million for the National Science Foundation.

And they would like to see that money appropriated this year, in a supplemental appropriations bill.

The \$250 million would restore projects cut at Fermi National Accelerator Laboratory, the DOE's particle physics lab in Batavia. Last year, Congress passed an appropriations bill that cut Fermilab's funding by \$52 million, forcing the facility to halt projects in progress and put employees on rolling furloughs. Layoffs will likely follow later this year, with 10 percent of the lab's staff expected to lose their jobs.

[Read more](#)

Accelerator Update**March 14-17**

- Four stores provided 54 hours and 59 minutes of luminosity
- CUB column #1 need regeneration
- Store 5986 had a peak luminosity of 285.05E30, it was lost due to a quench after 21 hours
- Store 5989 set a NEW RECORD for peak luminosity of 315.55E30
- Last week's integrated luminosity set a NEW RECORD with ~46.47 inverse picobarns

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

Announcements

Argonne National Laboratory.

"When a basic discovery is made, no one has any idea what it will lead to," said Rosner. And this disconnect is behind the financial crisis now afflicting Argonne and its sister institution, Fermilab.

[Read more](#)

[Have a safe day!](#)

Unix Web service meeting

The CD Central Services Group will hold a central Unix Web service town meeting on Wednesday, March 19, to get input on Web needs and long-term Web service direction.

Discounted tickets available

Discounted tickets are available for the following events: Chicago Bulls at the United Center, March 22, \$26 and March 25, \$30.

Going to CERN?

Take your camera! Have your photos featured in the Fermilab Remote Operations Center online gallery. Contact [Elizabeth Clements](#) for details.

Scottish Country Dance Tuesday

Scottish Country Dancing will meet Tuesday, March 18, at Kuhn Barn on the Fermilab site. Instruction begins at 7:30 p.m. and newcomers are always welcome. Most dances are fully taught and walked through, and you do not need to come with a partner. For more information, call (630) 840-8194 or (630) 584-0825 or folkdance@fnal.gov.

[Additional Activities](#)