

Calendar

Tuesday, January 4

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

Wednesday, January 5

11:00 a.m. Fermilab ILC R&D Meeting - 1 West

Speaker: N. Mokhov, Fermilab

Title: Beam Collimation and Machine-Detector Interface

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4:00 Fermilab Colloquium - 1 West

Speaker: N. Barlow, Northern Arizona University

Title: Beyond Tang: The Hidden Benefits of the Space Program

Wilson Hall Cafe

Tuesday, January 4

Tomato Bisque

Pesto Marinated Chicken Breast \$4.75

Burgundy Beef Tips \$4.25

Baked Fish Creole over Rice \$3.75

Grilled Chicken Caesar Wrap \$4.75

Supreme \$2.75

[Wilson Hall Cafe Menu](#)

[Chez Leon](#) will be closed through January and February

Weather

Open House to Launch LHC Physics Center



The LHC Physics Center will enable Fermilab physicists to collaborate on the CMS detector in Switzerland from the US. (Click on image for larger version.)

The Fermilab Community is invited to celebrate the opening of the new LHC Physics Center at an Open House today starting at 1:00, in the LPC's new residence on the 11th floor of Wilson Hall. The LPC's purpose is to assist the US physics community in participating in the exciting science at the CMS experiment at CERN's LHC.

Fantastic Physics: From Space Program Spin-offs to the Science of Comic Books



Director's Corner

Good Morning!

Welcome back and happy new year.

Operation of the accelerators was excellent over the holiday period. The collider operation became steadily more reliable and the integrated luminosity for December approximately matched the design goal for the first month of FY 2005 operation. The MiniBooNE beam has also come up well and is operating reliably. CDF, DZero, and MiniBooNE are running efficiently and taking high-quality data.



Mike Witherell

Unfortunately, the electrical power delivered to our site was interrupted twice on Sunday night, causing a power outage across most of the site and temporarily shutting down accelerator operations. Although all of Fermilab is now powered by one of our two substations, we need to restore the usual configuration before restarting normal operation. We are working with the electrical utility to schedule a planned power outage needed to restore that configuration.

This is the first Corner I have written since December 26, the date of the massive earthquake in the Indian Ocean. The tsunami associated with that quake has caused death, injury, and destruction at a scale that is almost unimaginable to those of us who live elsewhere. All of us at Fermilab send our condolences to the victims of this terrible disaster, many of



Chance of freezing drizzle **33°/25°**

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Apollo 11 astronaut Buzz Aldrin climbs down the lunar module Eagle's ladder to the surface of the moon. NASA photo.

Astronauts and comic book superheroes command (or contradict) the laws of physics with equally spectacular results, and the Fermilab Colloquium Series will explore the roles of both in the next two talks: "Beyond 'Tang:' The Hidden Benefits of the Space Program," on Wednesday, January 5; and "The Uncanny Physics of Superhero Comic Books," on Wednesday, January 12. Both presentations are geared to general audiences, are free, and are open to the public at 4 p.m. in 1 West.

Nadine Barlow, Assistant Professor of Physics and Astronomy at Northern Arizona University, goes beyond the orange drink that the Apollo astronauts took to the moon to examine other space program spin-offs: bar coding, medical imaging, suits worn by fire-fighters, smoke detectors, thermal gloves and boots are some examples. Detection of the 750K surface temperature of Venus in the 1960s led to the realization that the greenhouse effect (or "global warming") raised concerns for our own environment.

James Kakalios teaches a freshman physics course at the University of Minnesota called "Everything I Know About Science I Learned From Reading Comic Books," and declares that "superhero comic books get their science right more often than one would expect." Kakalios uses comic books, along with recent Hollywood movies, to illustrate basic physical principles such as forces and motion, conservation of energy, electricity and magnetism, and elementary quantum mechanics. Just one

whom are still suffering today.

Announcements

Upcoming Classes

January 10 - 14: Advanced Linux
January 19: Editing HTML for Admin. Profs.

Radio Network Migrations

Just a reminder that all affected VHF radio networks either have been or will be cutover to the new narrowband standard by the end of this week. You should tune your radios to the new channel(s) - channel 1 in most cases - and discontinue use of the wideband channels. Contact the Telecommunications Office at ext. 5411 or telecom@fnal.gov with any questions or for further information.

Smuckers Stars on Ice \$10-off Discount Tickets

This one-night show will run on Saturday, February 5, 2005 at 7:30 p.m. at the Allstate Arena. Order forms can be found in the Recreation Office or the [Recreation Web page](#). Deadline to order is January 19th at noon.

Travel Center Tour Deadlines

The Wonders of Iceland tour will be August 17. The deadline is February 17. Registration is accepted after this date if there are seats. More information is available on the [Recreation web page](#).

Strength Training Classes

Gain strength, lean body mass and increased muscle definition. The cost of the class is \$40, and it runs on Tuesdays and Thursdays from 5:30 - 6:30 p.m. from January 11 to February 10. Recreation Facility Membership is required, and the deadline to register is January 7. More

example: How strong would you actually have to be to "leap tall buildings in a single bound"?

Colloquium chair Cathy Newman Holmes of PPD-Experimental Physics Projects says she's always looking for people who can explain the benefits of scientific research, as in Barlow's talk. "We can always spend more time talking about this," she says. And as for the superheroes: "There's certainly widespread interest in them, and local high school teachers in particular might find some tips for illustrating basic physics principles."

Accelerator Update

December 27 - January 3

- Operations established five stores during the last week of 2004 and the beginning of 2005. Unfortunately, the last store, which had our highest initial luminosity since the shutdown ended, 80E30, was lost due to the power outages on the Monday midnight shift.
- The Tevatron quenched two times just before stores were established during this period.

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

In the News

information can be found [here](#).

Women's Personal Protection and Self-Defense Class

This class is open to Fermilab women, mothers and daughters. Minimum Age 12, No Maximum Age. The cost is \$35, and the class runs every Wednesday from 5:30 to 7:30 p.m. from January 12 to February 16 in the Village Kuhn Barn. Deadline to register has been extended to January 7 at noon. More information can be found [here](#).

New Books at Fermilab Library

New books are now on display in the Fermilab Library. An online list of the of new books is now available [here](#).

New Book Suggestion Lists

New Book purchase suggestion lists are available [here](#). These include book lists in four subject areas. There is also an Amazon suggestion list in the form of a shopping cart, viewable by entering the password "library." Please send an e-mail to [Sandra Lee](#) with your book purchase recommendations from these lists, or from other sources.

Country Line Dancing Classes

Learn the newest (and some good ole oldies) Country Line Dances taught by Randy and Mary Love. Classes run from January 20 through February 24, and are held on Thursdays in the Village Kuhn Barn from 6:00 - 7:00 p.m.. This six-week session is \$30.00. Beginners and Intermediate levels are welcome. The deadline is January 14. More information can be found [here](#).

Scottish Country Dancing

Scottish Country Dancing will be held on Tuesday, January 4 at 7:30 p.m. at the

From FYI #162, December 28, 2004

Survey Results: American views on science issues

One of the speakers at this month's seminar sponsored by the American Association for the Advancement of Science on the November election was Kathleen Frankovic, who is the director of surveys for CBS News. This unit designs and implements surveys for CBS News and the CBS News/New York Times polls. Frankovic discussed pertinent survey results as they related to several science issues.

[read more](#)

Geneva American Legion Post. Info at 630-584-0825 or 630-840-8194 or folkdance@fnal.gov.

International Folk Dancing

International Folk Dancing will be held at 7:30 p.m. Thursday, January 6, at the Geneva American Legion Post. Info at 630-584-0825 or 630-840-8194 or folkdance@fnal.gov.

[Upcoming Activities](#)