

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, April 22

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

[SCRF meeting](#) - One North

9 a.m.- 7 p.m.

[Third Annual Low Emittance](#)

[Muon Collider Workshop](#) - One

West

2 p.m.

Laboratory-wide meeting - Ramsey Auditorium

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

[Accelerator Physics and](#)

[Technology Seminar](#) - One

West

Speaker: S. Holmes, Fermilab
Title: Project X and the Future of the Fermilab Accelerator Complex

Wednesday, April 23

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

[SCRF meeting](#) - One North

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[Third Annual Low Emittance](#)

[Muon Collider Workshop](#) - One

West

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

[Fermilab Colloquium](#) - One

West

Speaker: J. Grant, Smithsonian Institution

Announcement

Dr. Orbach to speak today at laboratory-wide meeting

Dr. Raymond L. Orbach, Under Secretary for the DOE Office of Science, will speak at a laboratory-wide meeting at 2 p.m. Tuesday, April 22, in Ramsey Auditorium. All employees and users are invited.

Dr. Orbach will discuss the budget situation, including the President's FY09 budget request. He will answer questions from the audience after his talk.

Feature

Nothing but QuarkNet...



NCAA Tournament 2008: Men's Bracket

Science stars and sports stars rarely align, except on the NCAA basketball court.

Want to pick winners for the annual March Madness office pool? Skip the schools' sports statistics and focus on their QuarkNet science-outreach programs.

Seriously.

For the past decade, employees at Fermilab and the University of Florida tracked the rankings of NCAA teams compared to QuarkNet participation.

Scientists that give time to the program score big for their universities.

The Kansas University men's team took the title in 2008 and the second place women's ranking went to Stanford University, a QuarkNet alumni. In 2004, all Final Four teams claimed QuarkNet allegiance.

Director's Corner

True north

Last week I made two presentations at the American Physical Society meeting in St. Louis on our plans for the future, based on [Project X](#). Additional talks during the meeting tackled detailed aspects of the potential physics program. The sessions were well attended; I received many comments afterwards that reflected enthusiasm for the program and its many possibilities.



Pier Oddone

What we are proposing constitutes a vital physics program for the field in the short, intermediate and long terms. Along the way we would develop a beam to the Deep Underground Science and Engineering Laboratory for a beautiful long-baseline neutrino program. Ultimately Project X could serve as the front end of a neutrino factory or muon collider. In addition, Project X would help us develop the superconducting radio frequency technology that we would need for an ILC later in the decade. Coincidentally this week at Fermilab we are hosting a workshop on superconducting RF for the ILC and simultaneously the Low Emittance Muon Collider Workshop.

Talking to physicists at the APS is one thing. Talking to MBA students is another, and I must admit quite useful. Last week I gave two lectures on how we do strategic planning for our field to two sets of MBA students at the University of Chicago Graduate School of Business. The GSB has led the joint leadership training program for ANL and Fermilab staff, and my lecturing at the GSB was only a small way to say thank you for the great job the GSB is doing for us. The Q&A session afterwards was illuminating. While the students were clearly intrigued by the physics we do and supportive, the questions they asked we would be wise to learn to answer. I am still pondering one of them: How can you sell a program without the "true north" of the market? If we have a market it is a very complex one: our HEP community with its own divisions, the broader scientific community, the

Title: The Mission of the Mars Exploration Rovers

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

Weather

 **Chance of storms**
71 °/49°

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

[Secon Level 3](#)

Wilson Hall Cafe

Tuesday, April 22

- Tomato bisque
- Fajita style grilled turkey burger
- Grilled tilapia w/fresh fruit salsa
- Organic tomato basil & fresh mozzarella sandwich
- Assorted slice pizza
- Earth Day special penne pasta

[Wilson Hall Cafe Menu](#)

Chez Leon

Wednesday, April 23

Lunch

- Chipotle shrimp on corn cakes
- Tropical fruit platter

Thursday, April 24

Dinner

- Closed

[Chez Leon Menu](#)

Call x4598 to make your reservation.

Archives

[Fermilab Today](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[ILC NewsLine](#)

The DOE- and NSF-sponsored QuarkNet program brings high school students and teachers to the frontier of 21st century research by involving them in research programs at the world's major particle physics laboratories.

High school students and teachers connect with Fermilab and other particle physics research centers through university scientists working on experiments. At Fermilab, they work on the largest U.S. particle detectors, DZero and CDF. For their classrooms, students also build cosmic-ray detectors.

In the past decade, on average, a dozen of the 64 NCAA teams have had ties to QuarkNet. Half of the last 10 champion men's teams claim QuarkNet membership.

"That's pretty cool," said Spencer Pasero, of Fermilab's Education Office. "The QuarkNet men's teams do better at every stage than expected. The QuarkNet schools in the women's tournament do better than expected in the first and second rounds and then come back to the field."

QuarkNet consistently had a higher proportion of men's teams advancing to the Final Four and women's teams advancing to the Sweet 16. The men's teams advance to the Final Four at a rate of one in seven, twice the expected rate. Non-QuarkNet teams advance to the Final Four at a rate of one in 21.

If you're going to bet your office coffee money on something, bet it on science.



NCAA Tournament 2008: Women's Bracket

In the News

Administration, the Congress and ultimately the public. Sometimes it seems as if we must be on the North Pole itself, since the compass points to different directions in rapid succession. Lining up this complex market, holding it steady on "true north" so we get something done, is now the most important task in front of us.

Accelerator Update

April 11-21

- Six stores provided luminosity during this last week
- TeV experts found CDF aperture restriction that caused several quenches
- Booster ground faults caused by cables
- P2 vacuum burst delays D0 and CDF data taking
- Fermi monitors West Salem, IL earthquakes
- Power glitch trips off devices in Linac, Booster, and Accumulator

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

Announcements

[Have a safe day!](#)

Blood drive April 22, 23

Mark your calendars. Heartland Blood Centers will conduct a Fermilab Blood Drive on April 22 and 23 from 8 a.m to 2 p.m. in the Wilson Hall Ground Floor NE Training Room. Schedule appointments on the [Web](#) or call Diana at x3771 or Margie at x5680. More information available [here](#).

Computer programming course April 24

"C++ Templates and Template Metaprogramming," the third course in the current series of "Selected Topics in Computer Programming," will occur on Thursday, April 24. Aimed at programmers with C++ experience, it will deal in depth with issues related to function and class templates in modern C++ programs. Attendees will learn techniques of template-based programming and metaprogramming, as well as related new techniques from the next C++ standard. Participants will receive TRAIN credit for the free course. Course registration is now [open](#). Future courses will occur at two-week intervals.

NALWO Spring Tea May 5

Members of Fermi National Accelerator Laboratory Women's Organization will hold their Spring Tea on May 5 from 11 a.m. - 1 p.

Info

Fermilab Today

is online at:

www.fnal.gov/today/

Send comments and suggestions to:

today@fnal.gov

Quasar tests general relativity to the limit

From *physicsworld.com*, April 16, 2008

Astronomers have obtained the most compelling evidence yet that massive objects dramatically warp space-time, as predicted by Einstein's general theory of relativity. Although the geometric nature of gravity was first demonstrated in 1919, when Arthur Eddington famously detected the subtle warping effect of the Sun on the light from distant stars, the new results provide the first test of Einstein's theory in much stronger gravitational fields.

In fact, team leader Mauri Valtonen of Tuorla Observatory in Finland claims the work provides the first hard evidence for black holes, which are so massive that space-time is predicted to completely curve in on itself: "People refer to the concept of black holes all the time, but strictly speaking one first has to prove that general relativity holds in strong gravitational fields before we can be sure that black holes exist," he told physicsworld.com.

[Read more](#)

m. Barbara Oddone will host the event in her home, Site #29, located just inside the Wilson Street gate. Photo identification is necessary to enter the laboratory. When entering at Wilson Street, turn right at the driveway just beyond the gate. If possible, please bring a favorite dessert or appetizer from your country. For additional information contact [Susan Kayser](#), [Margie Nagaitsev](#), or the [Housing Office](#) at (630) 840-3777.

Scottish Country Dance Tuesday

Scottish Country Dance will meet Tuesday, April 22, 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](#)