

Calendar

Tuesday, April 4

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

4:00 p.m. Accelerator Physics and
Technology Seminar - 1 West
Speaker: Z. Xie, Duke University
Title: Designs and Optimization for a
Series-Fed, Broadband Impedance-
Matched, End-Fire Linear Antenna Array

Wednesday, April 5

11:00 a.m. Academic Lecture Series -
Curia II
Speaker: S. Dodelson, Fermilab
Title: The Smooth Universe – Course 6
(2nd Lecture)

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

4:00 p.m. Fermilab Colloquium - 1 West
Speaker: J. Lykken, Fermilab
Title: Is Particle Physics Ready for the
LHC?

THERE WILL BE NO FERMILAB ILC
R&D MEETING THIS WEEK

Weather



Mostly Sunny **55°/30°**

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

[Secou Level 3](#)

Wilson Hall Cafe

ILC reviews at Fermilab



Two different reviews of the proposed positron-electron collider will bring ILC leaders to Fermilab this week. (Illustration: Symmetry Magazine Courtesy of KEK and Rey Hori; [click on image for larger version.](#))

If you have trouble finding a place to park this week, blame the Global Design Effort for the International Linear Collider. Two different reviews of the proposed positron-electron collider will be conducted this week, bringing ILC leaders from around the world to Fermilab.

Tuesday and Wednesday, Paul Grannis of the Department of Energy and Jon Kutcher of the National Science Foundation will review the ILC-Americas program. "This is the first time that the ILC-Americas program will be reviewed by the Department of Energy and the National Science Foundation," said Gerry Dugan, GDE Regional Director for the ILC-Americas. "We will be discussing funding and current R&D projects. These kinds of reviews are useful for keeping us on track and aligned with the overall goals for the project."

A second review will be conducted later this week on Thursday and Friday by the Machine Advisory Committee, chaired by

Director's Corner

Striking Paydirt

Last week the MINOS collaboration presented their first results, coming only ten months after the start of their first run. These results are already playing on the world stage and will be even better by the summer



Pier Oddone

conferences. Minos has 50 percent more data to analyze from the run just concluded. This additional data already in the can together with improvements in the data analysis will yield a significant statistical improvement even before MINOS collects any more data. Furthermore, the next couple of years will multiply the MINOS data set several-fold, yielding the most precise measurement of neutrino oscillations in which the second and third neutrino generations mix.

These results from MINOS add to the crop of results from the Tevatron that are starting to come out with a full inverse-femtobarn of data. Perhaps the most striking result from the new crop of Tevatron results thus far is the D0 result in the mixing of Bs mesons, mesons that contain a beauty quark and a strange quark. These mesons change from particle to anti-particle very quickly, many times per picosecond. The D0 Collaboration has determined the first double-sided limit on the oscillation frequency giving evidence that the Bs

Tuesday, April 4

- Golden Broccoli & Cheese
- Hickory Smoked BBQ Pork
- Coconut Crusted Tilapia
- Spaghetti w/Meatballs
- Toasted Almond Chicken Salad on Croissant
- Supreme Baked Pizza
- Chicken Fajitas

The Wilson Hall Cafe accepts Visa, Master Card, Discover and American Express.

[Wilson Hall Cafe Menu](#)

Chez Leon**Wednesday, April 5****Lunch**

- Asian Grilled Beef Salad
- Cold Lime Souffle w/Coconut Cookies

Thursday, April 6**Dinner**

- Minestrone
- Grilled Lamb Chops
- Celery Root & Potato Mash
- Vegetable of the Season
- Cassata

[Chez Leon Menu](#)

Call x4512 to make your reservation.

Search

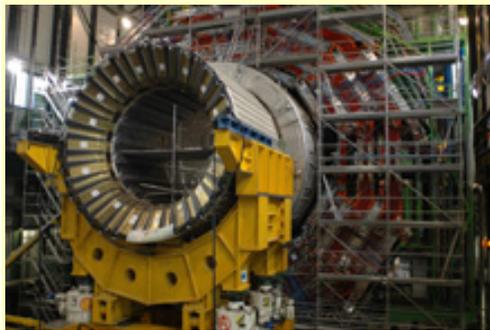
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Info

DESY's Ferdinand Willeke. Involving ILC scientists from around the world, this MAC Review will assess the global accelerator program. This will also be the first review of its kind for the ILC. The MAC Review will be a closed meeting.

Stay tuned to [ILC NewsLine](#) for reports on both reviews.

— *Elizabeth Clements*

What's Happening at CMS?

Hcal installation: The Hadron Calorimeter is being installed in the solenoid. Made of Brass and scintillator, HCal has a diameter of 6 meters, a length of 9 meters and weighs about 1,000 tons. HCal will help identify quarks, gluons and neutrinos by tracing jets in the detector. Click [here](#) for the most up-to-date status of CMS construction at Point 5 via live webcam. (Photo courtesy of Slawomir Tkaczyk; click image for larger version.)

Milestones**Tree planting for Doug Michael**

system does not reveal any flavor-changing effects due to theoretical phenomena such as supersymmetry. Additional results on Bs mixing should soon be available from CDF as well. The combination of these Bs mixing results with the limits on rare decays of the Bs constrains the kinds of models that are possible in theories of supersymmetry.

Progress has also been made on the sensitivity for the detection of low-lying Higgs bosons, with relatively light masses below 180 GeV. We have a long way to go to discover a Higgs or to exclude it, but the indications that we can get there after the findings with just one femptobarn of data are very encouraging.

These striking results have been achieved because of the focus and persistence of the accelerator and detector teams. As these teams continue to exploit the extraordinary facilities we have, they may strike still more gold. Meanwhile, we celebrate these beautiful results along the way.

Announcements**SIST Program**

The Fermilab SIST program brings college students to the Lab for a 12-week internship each summer, giving opportunities in science and technology to minorities that historically have been under-represented in science in the US. If you would like to have an intern working for you, now is the time to make the request. We will have 15 top-notch interns in the program and we need a job for each of them. There are several ways to request an intern:

- Reply to Elliot McCrory by email (mccrory@fnal.gov) and he will record

Fermilab Today is online at: <http://www.fnal.gov/today/>

Send comments and suggestions to today@fnal.gov

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Michael's mother, father and life-partner, Matthew McLaughlin, were the among first participants to surround the saplings with soil at Friday's ceremony.

Doug Michael, MINOS co-spokesperson who passed away last winter, was honored with a tree planting ceremony on Friday. Speakers included Fermilab Director Pier Oddone, MINOS co-spokesperson Stan Wojcicki, AD Head Roger Dixon, and MiniBooNE co-spokesperson and longtime friend Janet Conrad. The new trees, along with a bench dedicated to Michael, are near the MINOS service building. The *Fermilab Today* obituary for Michael can be read [here](#).

In the News

Chicago Sun-Times, April 2, 2006:

Fermilab test probes subatomic mysteries

Imagine that a bunch of sports cars are zipping along the highway when all of a sudden some of them turn into minivans.

Something equally bizarre apparently happens in the subatomic world with a class of particles called neutrinos. The strange behavior is showing up in a \$171 million experiment at west suburban Fermilab.

Fermilab produced trillions of neutrinos and aimed a beam of them at an underground lab 450 miles away in northern Minnesota. During the journey, it seems, some neutrinos changed into different forms.

[Read More](#)

your request

- Go to the [web page](#) for more details and a request form
- Call Dianne Engram (x4633) or Elliot McCrory (x4808).

2006 Summer Student Exchange Program

The US DOE and the Italian INFN announce the 2006 Summer Student Exchange Program, dedicated to the exchange of US and Italian students in science and engineering. Under the program, Italian students will be able to travel and do research in US labs and US students will be able to come to Italy and to do research in INFN labs and units. Now is the time to [apply](#).

Where will you be?

This Wednesday, at two minutes and three seconds after 1:00 in the morning, the time and date will be 01:02:03 04/05/06. This only happens once every hundred years.

Fermilab Folk Club Barn Dance

Fermilab Folk Club Barn Dance Sunday, April 9 at 6:30 p.m. with music by the No Mountain Boys and calling by Dan Saathoff. More info at [the folkdance website](#).

Survey

Fermilab is in the process of applying to win a place as one of Chicago's Best and Brightest Companies to Work For. One of the requirements is that they survey 80 percent of our employees by e-mail. These surveys will reach employees in the next few days, so don't be surprised if you see one in your inbox.

[Upcoming Activities](#)

