

Calendar

Monday, April 3

11:00 a.m. Academic Lecture Series - Curia II

Speaker: S. Dodelson, Fermilab

Title: The Smooth Universe - Course 6 (1st Lecture)

2:30 p.m. Particle Astrophysics Seminar - Curia II

Speaker: K. Smith, University of Chicago

Title: Fast PowerSpectrum Estimators Which Do Not Mix E and B Modes

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

4:00 p.m. All Experimenters' Meeting - Curia II

Special Topics: COUPP Bubble

Chamber Test, MI Beam Position Monitor

Upgrade, NuMI Horn Repair, Capture

Cavity II in Meson

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

Weather



Morning Showers **49°/29°**

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

Energy Secretary to Visit Fermilab Friday, April 7



Secretary of Energy Samuel Wright Bodman will visit Fermilab on Friday morning, April 7. After a brief tour of the lab, he will hold an All-Hands meeting in Ramsey Auditorium at 11:00 a.m. All Fermilab employees are encouraged to attend.

NERP provides an outdoor laboratory for many levels



Students, researchers, and citizen scientists have studied everything from diversity in mosquitoes to mortality in Canada Geese here, thanks to Fermilab's designation as a National Environmental Research Park. (Click images for larger version.)

Safety Tip of the Week

Insulating gloves



Bob Ducar, Chair of Fermilab's Electrical Safety Subcommittee, notes that insulating gloves are a critical component in protecting workers from electrical shocks, the most common electrical hazard. If you attended one of the recent NFPA 70E training sessions, you learned that insulating gloves are almost always required when the worker is within the Restricted Approach Boundary of exposed energized conductors or parts. Insulating gloves are rated in "Classes" according to voltage protection and, like most apparel, are available in different sizes. "Protectors" are leather gloves that are worn over the insulating gloves to minimize abrasion and puncture damage. Commonly issued Class 0 gloves offer protection from shock up to 1000 volts AC and 1500 VDC.

Insulating gloves have a shelf-life of 12 months from their last test. Once put in service, they must be re-tested after six months of use by an offsite testing facility. Fermilab workers who require

[Secon Level 3](#)**Wilson Hall Cafe****Monday, April 3**

- Minestrone
- Chicken & Mushroom Cheese Steak
- Baked Chicken Enchiladas
- Pot Roast
- BLT Ranch Wrap
- Assorted Slice Pizza
- Kung Pao Chicken

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

Search the Fermilab Today Archive

Info

High-energy particle physics isn't the only research happening here at the lab.

Fermilab is one of only seven National Environmental Research Parks (NERP) in the country, and at any given time, the NERP program may have as many as half a dozen environmental research projects underway. Projects from Argonne National Laboratory researchers using Fermilab as an "outdoor lab," in particular, have spanned more than a decade. They have been studying soil microorganisms to look at how that community changes when land use switches from agriculture to prairie. Argonne researchers have also been studying carbon flux and flux of atmospheric gases to understand the ability of different ecosystems to sequester carbon, and hence, the impact of different ecosystems on global warming.

Individuals needn't be from large labs or academic institutions to request use of a NERP. Projects have been conducted by researchers at all levels--from Argonne scientists, to university graduate students completing thesis research, to members of a local birding club doing bird surveys.

Anyone who is interested in using the "outdoor lab" for an environmental research project can contact Rod Walton of FESS (x2565, rwalton@fnal.gov), the NERP coordinator, to begin the proposal process. The proposed research will be reviewed to ensure it meets safety standards, among other requirements. If a project is approved, the researcher and lab complete a Memorandum of Understanding (MOU) that outlines the rules and obligations of both parties. MOUs are usually good for three years and are renewable. Project parameters

insulating gloves will alternate wearing two pairs of different colors: a Black pair between April 1 and September 30 and a Blue pair between October 1 and March 31. The used pair will be tested in the interim. If you think or know that you need insulating gloves for your work, contact your Division/Section ES&H organization. They will assist with sizing, selection, procurement and the testing process. You will initially receive a starter kit containing of a pair insulating gloves, leather protectors and a canvas storage bag.

Bob Ducar reminds everyone that "It's relatively easy to protect yourself from shock with insulating gloves, but they only work if you wear them!"

[Safety Tip of the Week Archive](#)

Announcements**Tartan Day Celebration**

Silk & Thistle Scottish Country Dancing will hold a party to celebrate Tartan Day on Tuesday, April 4, at Kuhn Barn on the Fermilab site. The evening begins at 7:30 p.m. and newcomers are particularly welcome. They can try out easy dances and sample Scottish foods and view information on Scotland and its tartans. Info at 630-840-8194 or 630-584-0825 or folkdance@fnal.gov.

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 underrepresented in science in the US. If you would like to have an intern working for you, now is the time to make the

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

Send comments and suggestions to today@fnal.gov

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also can be amended. "In over 15 years, we've concluded MOUs for 74 projects," says Walton. "The nice thing is we get good information about our site that we wouldn't learn otherwise."

—*Dawn Stanton*

In the News

***The Register,* March 31, 2006:**

The mystery of the vanishing neutrinos

Physicists have confirmed enigmatic sub-atomic neutrino particles do indeed have mass. Seemingly paradoxically, the MINOS experiment at the huge underground Fermilab accelerator in Illinois corroborated the fact by showing that they disappear.

The multinational team sent a high-intensity beam of neutrinos from Fermilab through 450 miles of solid rock to the Soudan detector in a former Minnesota iron mine. Neutrinos are so small and weakly interacting they can pass through the entire planet uninterfered with.

The scientists say that if their neutrinos had no mass, long thought to be a strong possibility, they would have detected around 180 interactions. Instead, just 92 were observed. UK-based Keith Mason, CEO of PPARC, said: "The MINOS experiment is a hugely important step in our quest to understand neutrinos."

The MINOS finding is consistent with neutrino oscillation explanation of the particle's odd properties.

[Read More](#)

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 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](#).

Professional Development

New classes are always being added to the professional development schedule. For the most up-to-date course offerings, go to [the web page](#).

[Upcoming Activities](#)

