

## Calendar

**Friday, July 18**

**3:30 p.m.**

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

**4 p.m.**

[Joint Experimental-Theoretical Physics Seminar](#) - One West

Speaker: J. Formaggio, Massachusetts Institute of Technology

Title:Twilight: Results from the Third and Last Phase of the SNO Experiment

**Monday, July 21**

PARTICLE ASTROPHYSICS SEMINARS WILL RESUME IN THE FALL

**3:30 p.m.**

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

**4 p.m.**

All Experimenters' Meeting - Curia II

Special Topic: COUPP

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

## Weather



**Chance of thunderstorms 89°/69°**

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

## Current Security Status

[Secon Level 3](#)

## Wilson Hall Cafe

## Feature

### Preparing the next generation of neutrino physicists



Former neutrino summer school students and current graduate students Georgia Karagiorgi and Matt Toups accept an award for their proposal for a neutrino experiment during the Users' Meeting in June.

Georgia Karagiorgi and Matt Toups want to build a giant, super-intense laser with a 100-kilometer beamline to detect "relic neutrinos" from 14 billion years ago.

This cosmic neutrino spectrometer could someday explain how the universe evolved two or three seconds after the Big Bang.

Such big ideas are exactly the type of innovative, enthusiastic thinking Fermilab scientists want to stir in upcoming researchers.

The pair of Columbia University students received a first place award at the Users' Meeting in June for their unique proposal, part of a neutrino experimental challenge held in 2007 during a 10-day Fermilab Neutrino Physics Summer School. The biannual school will take place again in 2009.

"It was so much fun," Karagiorgi said. "And, it was just in the spirit of the school. Matt and I took what we learned in the lectures and applied it to our projects."

The contest was designed to get students thinking about future experiments for neutrinos, a growing focus of particle physics research. Students were discouraged from letting today's resource constraints limit their ideas.

## From iSGTW

### São Paulo grid brings teraflops to Brazilian researchers

Researchers at São Paulo State University (UNESP) in Brazil will soon have 33.3 teraflops (33.3 trillion floating point operations per second) at their fingertips. GridUNESP, the university's first computational infrastructure fully dedicated to scientific research, is scheduled to come online in October.

The \$1.9 million grid will consist of 368 servers on seven university campuses in the Brazilian state of São Paulo and will be the largest in Latin America. Further, GridUNESP has established a partnership with Open Science Grid (OSG), potentially increasing the number of processors available to GridUNESP several-fold.

—*Amelia Williamson, iSGTW*

[Read more](#)

## In the News

### FY 2009 Senate DOE Office of Science Appropriations Bill

From *AIP FYI*, July 17, 2008

The Senate Appropriations Committee has completed work on its version of the FY 2009 Energy and Water Development Appropriations Bill. S. 3258 provides \$33.8 billion for civilian programs and nuclear weapons programs in the Department of Energy and funding for the Army Corps of Engineers. It was passed unanimously by the committee.

The following are selections from Senate Report 110-416 accompanying the bill; the entire text may be read at here.

The House Appropriations Committee has written, but not filed, its version of the FY 2009 Energy and Water Development Appropriations Bill. See FYI #76 for excerpts of the comparable House committee report language.

Note that the "current budget" figures include

**Friday, July 18**

- Old fashioned ham & bean
- Philly style chicken
- London broil
- Smart Cuisine: baked fish over rice
- Roasted veggie & provolone panini
- Assorted slice pizza
- Roasted pork loin w/ raspberry sauce

[Wilson Hall Cafe Menu](#)

**Chez Leon**

**Wednesday, July 23 Lunch**

- Tinga tostada
- Rice & beans
- Napolitano flan

**Thursday, July 24 Dinner**

- Pasta w/roasted summer vegetables
- Grilled swordfish
- Sauteed green beans
- Peach melba

[Chez Leon Menu](#)

Call x4598 to make your reservation.

**Archives**

[Fermilab Today](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[ILC NewsLine](#)

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Send comments and suggestions to: [today@fnal.gov](mailto:today@fnal.gov)

"We have so many questions. What caused matter to dominate antimatter?" said Gina Rameika, the school's codirector and head of Fermilab's neutrino department. "Neutrinos are fundamental constituents of the universe. Billions of solar neutrinos pass through our bodies every second. We should probably know a little more about them."

The school, one of few in existence, offers grad students and postdocs the opportunity to discuss and hear lectures from leading neutrino physicists. Fermilab's school comprises neutrino research conducted in the sky, underground, in reactors and with accelerators.

"There is a danger in getting too narrow in this subject, so we wanted to keep everything very broad," Rameika said. "You can't do all of particle physics in a single experiment. There are many tools you have to use to get to the fundamentals."

-- Jennifer L. Johnson

funding provided by the recently-enacted supplemental appropriations bill.

[Read more](#)

**Announcements**

[Have a safe day!](#)

**Paving project update**

Roads and Grounds would like to thank for their patience the employees and users who were inconvenienced by the A1/A2 paving project on Tuesday and Wednesday. Drivers used alternate routes and, at times, were delayed. With only a few exceptions, drivers were courteous and accommodating. We understand that often at this time of year drivers also experience many delays and detours. We appreciate Fermilab's courteous employees and users. Striping operations will complete the project within the next couple of days.

**Family Public Quadrat Study Saturday**

Families can help restore the prairie this weekend. A Public Quadrat Study for families will take place Saturday, July 19, from 9-11:30 a.m. Regular sessions of the quadrat study will take place on July 29 and Aug. 5. More information is available [online](#).

**Classifieds**

Find new [classified ads](#) on *Fermilab Today*.

**Additional Activities**