

## Calendar

### [Have a safe day!](#)

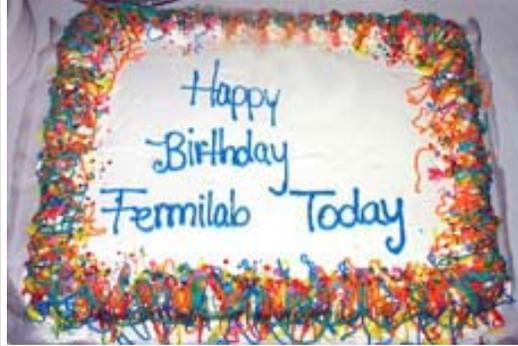
Monday, July 20  
9:30 a.m. - 6:30 p.m.  
[International Workshop on Neutrino Factories, Super Beams and Beta Beams](#) - One West  
10 a.m.  
[NuFact09 Seminar](#) - One West  
Speaker: Edward Kearns, Boston University  
Title: Summary of Neutrino Oscillation Physics  
PARTICLE ASTROPHYSICS SEMINARS WILL RESUME IN THE FALL  
3:30 p.m.  
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over  
THERE WILL BE NO ALL EXPERIMENTERS' MEETING THIS WEEK

Tuesday, July 21  
10:30 a.m.  
[Research Techniques Seminar](#)  
- POSTPONED  
Speaker: Jeff Martoff, Temple University  
Title: Liquid Argon for Dark Matter Detectors  
12 p.m.  
[Summer Lecture Series](#) - Curia II  
Speaker: Ralph Pasquinelli, Fermilab  
Title: Engineering at Fermilab  
3:30 p.m.  
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over  
THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

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

## Special Announcement

### Happy sixth birthday, *Fermilab Today*!



*Fermilab Today* turns 6 today.

On July 20, 2003, Fermilab's Office of Public Affairs launched *Fermilab Today*. With daily delivery, *Fermilab Today* has become an integral part of life at the laboratory.

Since its inception, *Fermilab Today* has highlighted research results, communicated both good and bad news, emphasized important activities and deadlines and shared the lives of those who read it.

## Feature

### Neutrino work at Fermilab gets EPS award



Niki Saoulidou (front) and Simona Murgia help assemble the MINOS near detector in 2004 at the New Muon Laboratory.

Niki Saoulidou is drawn to mysteries, the chance to sort through clues and piece together an answer.

Neutrinos, which have been involved in many mysteries and "anomalies" during the past 80 years, were ideal particles for her to study.

## ES&H Tips of the Week - Safety

### Computer Vision Syndrome



Computer Vision Syndrome is defined as the combination of eye and vision problems associated with close-range computer screen work.

When you look into the distance your eyes are relatively relaxed. When you focus on something nearby, your eye muscles get a work out.

Although this isn't necessarily a problem, an extended period of close-range focusing can cause eye strain, neck pain, blurry vision, headaches and difficulty changing focus, all elements that may occur with Computer Vision Syndrome. This may also cause dry eyes, because computer work often promotes reduced blinking. Studies have shown that eye problems occur in 75 to 90 percent of computer users. Here are some suggested on ways to avoid Computer Vision Syndrome:

- Everything in its place. Adjust the center of the computer screen so that it is 4 to 8 inches below eye level at a viewing distance 20 to 28 inches away. If you use a document holder, place it close to the screen so you don't have to swing your head back and forth or change focus.
- Moisten eyes. Blink whenever you begin to feel your eyes get dry or irritated. If you are sitting in a draft, move to keep the air flow out of your eyes. Avoid low humidity and contaminated air. Use eye drops (artificial tears) and stay hydrated.
- Can you see me now? Adjust the lighting and screen position to minimize glare and reflections. If you wear glasses, ask your optical specialist whether your prescription can be adjusted to accommodate computer

## Campaigns

“Neutrinos have shown, so far, perhaps the only hints of physics beyond the Standard Model,” she said. “No one expected how they behave a few years ago, and the hope is that they will continue to surprise us in the years to come.”

## Take Five

## Tune IT Up

## Weather

 Partly sunny  
78°/57°

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

## Current Security Status

## [Secon Level 3](#)

## Wilson Hall Cafe

Monday, July 20  
- French Quarter gumbo  
- French dip w/horseradish cream sauce  
- Santa Fe pork stew  
- Country baked chicken  
- \*Spicy hot Greek wrap  
- Assorted sliced pizza  
- Sweet n' sour chicken w/egg roll

\*Carb restricted alternative

## [Wilson Hall Cafe Menu](#)

## Chez Leon

Wednesday, July 22  
Lunch  
- Spinach & cheese stuffed portobello  
- Mixed green salad  
- Fresh fruit plate

Thursday, July 23  
Dinner  
- Closed

## [Chez Leon Menu](#)

Call x3524 to make your reservation.

## Archives

Saoulidou, 34, born and raised in Athens, Greece, has immersed herself in neutrino research from detector construction to analysis. She has participated in Fermilab neutrino experiments since her graduate school days at the University of Athens. She received her Ph.D. from that university in 2003.

That breadth and depth of her experience coupled with a passion for her work, which materializes in animated gestures and twinkling eyes when she talks about research, likely captured the attention of the European Physical Society. They picked her as one of two winners of the high-energy particle physics 2009 Young Physicists Prize. She will receive the award for outstanding neutrino research today at the EPS conference in Krakow.

The small size of neutrino collaborations often allows young physicists to work on varied aspects of research, rather than specialize early in their careers.

Saoulidou got to work on hardware, software and data analysis for the DONUT (E872) and MINOS (E875) experiments. As a member of NOvA (E929) and a future wide-band beam neutrino experiment from Fermilab to the proposed Deep Underground Science and Engineering Laboratory she also worked on software, simulation and optimization studies.

“I think Niki was one of the most productive members of the MINOS collaboration, both in putting the hardware together in the Near Detector and in the analysis,” said Stan Wojcicki, MINOS spokesman.

-- Tona Kunz

## Photo of the Day

work.

- Break it up. Follow the 20-20-20 rule. Every 20 minutes, look away from the computer and beyond 20 feet in the distance and then blink for 20 seconds.

-- Tim Miller, ES&H associate head

## [Safety Tip of the Week Archive](#)

## Special Announcement

## Intro to neutrinos lecture today at 10 a.m.

Have you ever wondered what makes neutrino physics so exciting? Find out today. At 10 a.m. today in Ramsey Auditorium, Boston University's Edward Kearns will lecture on the basics of neutrino oscillation physics. He will review the field's established results and discuss the challenges in designing future neutrino detectors.

## Shutdown Update

July 10 - 17

- Proton Source GMPS upgrade 90 percent complete
- Pbar kicker upgrade 70 percent complete
- Main Injector: all cores bored in MI-10 and MI-40
- Recycler Pelletron maintenance 30 percent complete
- Tevatron magnet unrolls 80 percent complete
- NuMI horn LCW leak repair completed
- Cryo System: warming TeV sector F3 to room temperature
- Controls installed the MTA switch-box
- MTA has completed the shield work
- MSS: all work completed
- Safety: no injuries reported

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

## Announcements

[Fermilab Today](#)[Result of the Week](#)[Safety Tip of the Week](#)[User University Profiles](#)[ILC NewsLine](#)**Info**[Fermilab Today](#)

is online at:

[www.fnal.gov/today/](http://www.fnal.gov/today/)

Send comments and suggestions to:

[today@fnal.gov](mailto:today@fnal.gov)Visit the Fermilab [home page](#)**Coyote on the hunt**

Fred Nobrega, TD, submitted these images of a coyote pouncing on its food: a field mouse. Nobrega took the series of images on June 4 near Batavia & Eola roads.

**In the News****The search for dark matter: Ethereal yet weighty**From *The Economist*, July 16, 2009

*Two new ways to detect the elusive stuff of the universe*

Most of reality appears to be missing. Physicists reckon that the missing matter must be there, but that it is dark. Finding the stuff is damned tricky because dark matter, by definition, cannot be seen. So some of those physicists have been busy trying to devise ways of glimpsing it indirectly—and two groups of them now think their methods are ready to test.

One reason to believe dark matter exists is that galaxies rotate at such speeds that they would fly apart without it, or so the argument goes. The fact that galaxies persist suggests they are held together by the gravitational pull of something invisible—in other words, dark matter. This stops stars being shed from their edges.

Claims to have spotted dark matter have so far rested mostly on evidence gathered by looking at collisions between clusters of

**Latest Announcements**[Deadline today for on-site housing-fall 2009/spring 2010](#)[Entry-level lectures on neutrino work today](#)[Toastmaster meeting July 23](#)[Free hips, buns & thighs 30-minute workout July 23](#)[Argentine Tango classes through July 22](#)[Free 10-minute chair massage July 22 and 23](#)[Intermediate/Advanced Python Programming July 22-24](#)[Reminder: Changes to FTL system](#)[Time to complete accomplishment reports](#)[Bristol Renaissance Faire discount tickets](#)[Six Flags Great America discount tickets](#)[Pool memberships available in the Recreation Department](#)[Raging Waves Waterpark online discount ticket program](#)[Accelerated C++ Short Course begins August 6](#)[Outlook 2007: New Features class August 6](#)[The University of Chicago Tuition Remission Program August 17 deadline](#)[Process piping \(ASME B31.3\) class offered in October and November](#)[Additional Activities](#)[Submit an announcement](#)

galaxies. Some of these appear to have separated dark matter from its visible counterpart. Three months ago, however, a team of physicists reported subatomic evidence. They think they have seen an abundance of high-energy positrons, the antimatter versions of electrons, coming from space, and they speculate that this, too, is a sign of dark matter.

[Read more](#)