

## Calendar

### Monday, August 1

PARTICLE ASTROPHYSICS SEMINARS  
WILL RESUME IN THE FALL

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

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

Special Topic: CDF Silicon Radiation  
Damage So Far

### Tuesday, August 2

**12:00 p.m.** Summer Lecture Series - 1  
West

Speaker: P. Oddone, Fermilab

Title: Future of Particle Physics

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

**4:00 p.m.** Accelerator Physics and  
Technology Seminar - 1 West

Speaker: J. Li, University of Rochester

Title: Upgrade of the Laser System for A0  
Photoinjector at FNAL

## Weather



Patchy Fog **90°/67°**

[Extended Forecast](#)

[Weather at Fermilab](#)

## Current Security Status

[Secou Level 3](#)

## Wilson Hall Cafe

## CDMS Intern Caputo Studies Dark Matter, Physics Careers



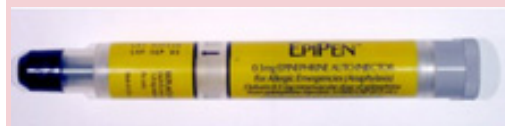
Summer intern Caputo works on the cryogenics for the CDMS experiment during her trip to the Soudan Laboratory in Minnesota. ([Click on image for larger version.](#))

While many college undergraduates are filling coffee cups and making photocopies at their summer internships, Regina Caputo is busy searching the skies for dark matter. Caputo, a fourth-year physics major at the Colorado School of Mines, is a summer intern with the [Cryogenic Dark Matter Search](#) (CDMS) team at Fermilab. She is working on the project's event display, writing a computer program that will allow "the rest of the collaboration to go through the data we've acquired."

Now in its second incarnation, CDMS currently has five silicon and germanium detector towers in the Soudan Underground Laboratory in Minnesota, and hopes to build two more towers in the near future. The detectors are cryogenic, cooled to extreme temperatures in refrigerators of liquid helium, which helps the team detect very low energy interactions. Ultimately, CDMS hopes to directly detect Weakly Interacting Massive

## Safety Tip of the Week

### Sting First Aid



An Epi-Pen manufactured by Dey Laboratories. This is the most common type of epinephrine autoinjector. These are commonly carried by persons with severe allergies since they can be self-administered and are fast-acting (Rx required).

Last week's safety tip dealt with avoidance of bee and wasp stings. This week we cover first aid measures. Most often, symptoms include sharp pain, swelling, itching and redness at the sting site. An allergic response, if it occurs, will appear within an hour. Such reactions tend to be minor, though a head/neck sting can block an airway through localized swelling. Symptoms that appear over the entire body signal an anaphylactic reaction that can be deadly within minutes. Watch for hives, swelling over major body parts, difficulty breathing, dizziness, fainting, chest pain, racing heartbeat, nausea, vomiting and diarrhea.

If you had an allergic reaction in the past, you should carry a sting allergy emergency kit (e.g., Epi-Pen). If stung, you should call the Lab's emergency number (X3131) even if you have already used an allergy injection kit. Also, make your coworkers aware of your sensitivity and what they should do if you are stung.

Any Fermilab employee who receives a sting in the course of employment should at least contact the Medical Department for a consultation (X3232). General first aid measures include scraping out any

## Monday, August 1

Wisconsin Cheese Soup  
Corned Beef Reuben \$4.85  
Stuffed Chicken Breast \$3.75  
Shepherd's Pie \$3.75  
Turkey Craisins Wrap \$4.85  
Meat Lovers Pizza \$3.00  
Pacific Rim Rice Bowl \$4.85

The Wilson Hall Cafe now accepts Visa, Master Card, Discover and American Express at Cash Register #1.

[Wilson Hall Cafe Menu](#)

## Chez Leon

### Lunch

#### Wednesday, August 3

Tri-Colored Tortellini Salad  
Lemon Cheesecake w/Blueberry Sauce

### Dinner

#### Thursday, August 4

Smoked Salmon Plate  
Veal Picatta  
Spinach Fettuccini w/ Tomatoes & Cream  
Chocolate Fondue w/Fruit

[Chez Leon Menu](#)

Call x4512 to make your reservation.

## Info

Fermilab Today is online at:

<http://www.fnal.gov/today/>

Send comments and suggestions to

[today@fnal.gov](mailto:today@fnal.gov)

[Fermilab Today archive](#)

[Fermilab Today PDF Version](#)

[Fermilab Result of the Week archive](#)

[Fermilab Safety Tip of the Week archive](#)

[Linear Collider News archive](#)

Particles (WIMPs), the lightest supersymmetric particles thought to exist and a leading candidate for dark matter. "I really enjoy the project," Caputo said. "It's very cutting edge, and directly advances what we know about the universe."

Caputo's internship is organized by the Science Undergraduate Laboratory Internships (SULI) program, which places undergraduate science and engineering majors in internships at DOE facilities across the country. The program aims to introduce students to the realities of physics careers, which have sometimes surprised Caputo. "What they expect you to do here is so much different than what they expect in a classroom," she explained. While she had no prior experience with particle astrophysics, she is considering continuing in the field in graduate school because of her experience with CDMS. "There is so much that we don't know about the universe yet, so it's a very exciting field," she said.

--Elizabeth Wade

## Accelerator Update

### July 27 - July 29

- During this 48 hour period operation established two store that combined with an existing store provided the experiments with approximately 26 hours and 27 minutes of luminosity  
- Stores lost due to quench and an inadvertent abort

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

## In the News

left-behind stingers; use a credit card or fingernail for this. Any squeezing could inject additional venom. Clean the sting area with soapy water, then cool the skin with ice cubes or an ice-pack wrapped in a cloth or thin towel for 15 minutes. Take OTC pain relievers and antihistamines, as necessary, taking appropriate precautions for drowsiness. Worsening of local symptoms over a few days suggests infection that requires medical attention. Watch for pain, increased swelling and redness, and warmth.

[Safety Tip of the Week Archive](#)

## Announcements

### Air Pollution Action Day

Today's conditions are favorable for unhealthy ozone and particulate matter levels. Residents of the Chicago metropolitan area are asked to curb vehicle use, postpone activities that use gasoline powered equipment, conserve energy, and avoid burning wood or yard waste.

### SEWS Test on Tuesday

The Sitewide Emergency Warning System (SEWS) is scheduled for testing on August 2, 2005 the first Tuesday of the month, at 10:00a.m. All components including the Emergency Alert Receivers (EARs) and voice interfaces for CDF, D-Zero, FCC and Wilson Hall will be tested. The test will begin and end with the announcement "THIS IS A TEST OF THE SITEWIDE EMERGENCY WARNING SYSTEM." Safety Alert Monitors and Emergency Alert Receivers will need to be reset after the test.

### NALWO English Classes

Meet in the User's Center on Monday and Friday mornings from 9:30am until 11:00

[Fermilab Today classifieds](#)

[Subscribe/Unsubscribe to Fermilab Today](#)

## From *Nature*, July 28, 2005

### Earthly whispers of geoneutrinos

by Amber Jenkins

Neutrinos originating from inside the Earth have at last been detected — a landmark discovery that will lead to a deeper understanding of the radioactive make-up of our planet, and of its overall heat budget.

[Read More](#)

am. Volunteer teachers work with students at all levels. Classes are free; you may begin any time. Two sessions meet simultaneously; one for beginners and one for more advanced students.

### Scottish Country Dancing

Scottish Country Dancing will meet Tuesday, August 2, in Ramsey Auditorium in Wilson Hall. 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. Dancing will continue in the auditorium through the summer. Info at 630-840-8194 or 630-584-0825 or [folkdance@fnal.gov](mailto:folkdance@fnal.gov).

[Upcoming Activities](#)