

Calendar

Friday, Sept. 28

3:30 p.m.

DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over

4 p.m.

Joint Experimental-Theoretical
Physics Seminar - One West
Speaker: T. Wright, University
of Michigan

Title: MSSM Higgs Searches
at CDF

8 p.m.

[Fermilab Lecture Series](#) -

Auditorium

Speaker: Dr. Uwe Bergmann,
Stanford Linear Accelerator
Center

Title: Archimedes: Ancient
Writings Under X-Ray Vision
Tickets: \$5

Monday, Oct. 1

1:30 p.m.

Research Techniques Seminar
- One West

Speaker: T. Bowcock,
University of Liverpool

Title: The LHCb Vertex
Detector

2:30 p.m.

[Particle Astrophysics Seminar](#)

- Curia II

Speaker: C. Galbiati, Princeton
University

Title: Recent Results from the
WARP Dark Matter Search

3:30 p.m.

DIRECTOR'S COFFEE
BREAK 2nd Flr X-Over

4 p.m.

All Experimenters' Meeting
Special Topics: GammeV (T-
969) Update; HINS Room
Temperature RF Cavity Test
Milestone - Curia II

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

Weather

Feature

Volunteers welcome at Fermilab's Prairie Harvest



Volunteers harvest seeds in October 2005.

Many people can claim success nurturing a backyard garden, but few people can say they helped grow a historic nearly 1,100-acre native prairie. This fall, Fermilab invites you to help with its prairie restoration project.

On Oct. 6 and Nov. 3, you can take your green-thumb skills to a whole new level and help restore Fermilab's prairie by collecting native seeds. Some of the seeds replenish land at the laboratory while others help build prairies at area schools.

Because of the restoration project, almost 20 percent of the laboratory's 6,800 acres house the same native grasses and wildflowers that greeted the first settlers.

In Illinois, fewer than one-tenth of one percent of native prairies remain intact. Fermilab contains one of the largest of these native prairies. The native grasses' deep roots help prevent erosion, trap rainwater and preserve the area's groundwater aquifers.

Every year volunteers, users and Fermilab employees of all ages keep the prairie healthy by combing through the Robert Betz Prairie and collecting several species of flowering plants.

The harvest allows the laboratory to re-seed sparse areas of the prairie and ensure a healthy diversity of plant life throughout the site. The plants and grasses keep butterflies and birds thriving onsite for bicyclists and hikers to enjoy. Restoring the original plant life also brought a return of dozens of long-absent

LHC Update

LHC triplet repairs complete



Fermilab Director Pier Oddone, CERN physicist Ranko Ostojic, Fermilab Deputy Director Young-Kee Kim, Fermilab physicist Peter Limon and Fermilab engineer Jim Kerby on a visit to a magnet assembly building at CERN in May 2007.
Credit: Tom Nicol, Fermilab

A team from CERN, Fermilab, Japan's KEK Laboratory and Lawrence Berkeley National Laboratory have successfully completed repairs to all triplet assemblies at CERN's Large Hadron Collider. The triplet components are now in the LHC tunnel for installation and testing. So far, three of eight triplets have been installed and successfully pressure tested in the tunnel. The remaining triplets are in the process of installation and pressure testing, to be followed by cooldown and powering in accordance with CERN's LHC schedule.

The triplets, which include three superconducting quadrupole magnets and the associated cryogenic and power distribution boxes, or DFBXs, will focus particle beams prior to collisions at each of four interaction regions in the LHC when it begins operating in 2008.

The repairs addressed problems with superconducting magnet assemblies furnished by Fermilab. Internal support structures broke in one triplet during a pressure test on March 27. To effect the repair, teams attached sets of four metal cartridges to each magnet assembly to limit movement of the magnets inside their metal jackets or cryostats. The teams also fixed design problems in the DFBXs and in the attachments of magnets to the tunnel floor.



Sunny 71°/47°

[Extended Forecast](#)

[Weather at Fermilab](#)

[Current Security Status](#)

[Secon Level 3](#)

[Wilson Hall Cafe](#)

Friday, Sept. 28

- Cream of wild mushroom
- Blackened fish filet sandwich
- Southern fried chicken
- Tuna casserole
- Eggplant parmesan panini
- Assorted pizza slices
- Assorted sub sandwich

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

Wednesday, Oct. 3

- Crepes w/ham & gruyere w/ Madeira cream
- Marinated vegetable salad
- Baked apples w/creme Chantilly

**Thursday, Oct. 4
Dinner**

- Shrimp bisque
- Grilled pork tenderloin w/ peach & ginger sauce
- Honey roasted root vegetables
- Hazelnut cake w/frangelico
- Crème anglais

[Chez Leon Menu](#)

Call x4598 to make your reservation.

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animals like badgers, the endangered Blandings turtles, bald eagles and snipes.

[Read more](#)

--Tona Kunz and Haley Bridger

Feature

Wanted: Fermilab volunteers to mold young minds

Contrary to the studies that say American teens don't learn enough science, Fermilab has an overflow of high school students looking to job shadow physicists, mathematicians and computer scientists.

"It is beginning to be more popular," said Carol Angarola, from the Fermilab Education Office.

But the constant requests from students and teachers exceed the typical list of 10 lab employees offering to show teens real-life lab work.

The Fermilab Education Office is seeking more employees to join a standing list of willing mentors. Currently, the same people keep taking on the volunteer role.

"Mentoring is a great and rewarding way to encourage more young people to stick with science," Angarola said.

Mentors have two options. They may choose to mentor during the summer or school holiday break, or they may choose to mentor for a semester or for the full-school year. Mentoring during the school year requires a commitment of one to two hours a week. Students work on minor portions of experiments and help with data analysis or input.

The students are juniors or seniors in high school who are considering careers in math or science. The students average a 5.0 grade-point average on a 5-point scale.

"These students are really bright," Angarola said. Mentors don't have to worry about babysitting the students or teaching them elementary physics.

Mentors may sign up by contacting Angarola at x3929 or Nancy Lanning at x5588.

-- Tona Kunz

In the News

[Read more](#)

-- Judy Jackson

In the News

Building the future of physics

From *MSNBC*, Sept. 26, 2007

Particle physicists can't afford to get too sentimental about where they work. They need bigger and bigger machines to focus on smaller and smaller frontiers - and when they just can't make the machines bigger, they have to blaze a completely new trail to those frontiers.

That's the situation facing researchers at the Fermi National Accelerator Laboratory, near Chicago: Some researchers are squeezing the last ounce of performance out of the 24-year-old Tevatron accelerator, looking for a mysterious particle called the Higgs boson. Others are working on the next big machine, Europe's Large Hadron Collider. And still others have begun building something called "Project X," the prototype for a radically different kind of multibillion-dollar physics machine.

[Read More](#)

Announcements

Have a safe day!

Posters on display

The posters presented during the DOE program review will remain on display on the 15th floor of Wilson Hall until Oct. 1.

Wellness brown bag seminar Oct. 5

Wellness Works and the U.S. Bone and Joint Decade will present a Brown Bag Seminar from noon to 1 p.m. on Friday, Oct. 5, in One West. Susan Broy, M.D. from the Illinois Bone and Joint Institute LLC will present "Fit to a T," an educational program about bone health and osteoporosis.

Fright Fest discounted tickets

Buy tickets now for Fermilab Fright Fest Days at Six Flags Oct. 19-21. Tickets are \$25.25 each and available at the Recreation Office, WH15W. If you cannot attend the Fermilab days, ask about other special savings for other weekends.

FNALU inbound e-mail stopped Oct. 1

On Oct. 1, 2007, direct e-mail delivery to FNALU nodes will cease. This change only

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

Send comments and suggestions to:
today@fnal.gov

Fermilab lecture looks at works of Archimedes

From *The Daily Herald*, Sept. 26, 2007

Fermilab Lecture Series presents "Archimedes: Ancient Writings in X-Ray Vision" by Uwe Bergmann of the Stanford Linear Accelerator Center at 8 p.m. Friday.

Archimedes of Syracuse (287-212 B.C.) is considered one of the most brilliant thinkers of all time, who made extraordinary contributions to mathematics, physics and engineering during the era of classical Greek civilization.

The 10th-century parchment document known as the Archimedes Palimpsest is the unique source for two of the Greek's treatises -- the Stomachion and The Method of Mechanical Theorems.

[Read More](#)

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Interpersonal Communication Skills

Learn effective communication strategies by assessing your communication style and developing skills for more productive work relationships through the Interpersonal Communications Skills course on Oct. 18. For more information and enrollment, go to the [Web site](#).

Kyuki-Do class begins on Oct. 1

Kyuki-Do combines the kicking of Taekwon-Do, the throwing and grappling techniques of Judo and Jujitsu, and the joint locks of Hapki-Do into one art. Classes are held from 5 to 6 p. m. on Monday and Wednesday at the Recreation Facility in the Village. Teacher Bruce Worthel will focus on a practical self-defense that women or men can use. You will learn kicks, blocks, hand techniques, throws, pins and self-defense. You will learn forms that teach you balance, power and grace. Register through the Recreation Office; classes cost \$45 per six-week session. You must be a member of the Recreation Facility to join.

Classifieds

New [classified ads](#) have been posted on *Fermilab Today*.

[Additional Activities](#)