

Calendar

Friday, October 1

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4:00 p.m. Joint Experimental

Theoretical Physics Seminar - 1 West

Speaker: T. Maruyama University of Tsukuba

Title: $t\bar{t}$ Cross Section Measurement Using Kinematic Fitting of B-Tagged Lepton+Jet Events at CDF

Saturday, October 2

10:00 a.m. [Prairie Seed Harvest](#) -

Follow directional signs from Pine Street. Advance registration required for people without ID. Call 840-3303.

Monday, October 4

2:30 p.m. Theoretical Astrophysics

Seminar - Curia II

Speaker: J. Collar, University of

Chicago

Title: COUPP, the Chicago

Observatory for Underground Particle Physics, A Dark Matter Search In Your Backyard

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

THERE WILL BE NO ALL

EXPERIMENTERS' MEETING THIS

WEEK

Wilson Hall Cafe

Fermilab Volunteer Prairie Seed Harvest Celebrates 30 Years



(Left to Right) Dave Shemanske, Bob Lootens, and Mike Becker of Roads & Grounds at last year's Prairie Harvest. (Click on image for larger version.)

Fermilab's Roads & Grounds Department hosts the 30th Volunteer Prairie Seed Harvest this year on Saturday, October 2 and Saturday, October 30 from 10:00 a.m. to 2:00 p.m. Every fall, Roads & Grounds together with Fermilab Prairie Restoration Project founder Bob Betz invite employees, users and neighbors to help revive the native grasslands that were destroyed during the area's settlement in the nineteenth century. Thanks to the dedication of Roads & Grounds, Betz and hundreds of volunteers, more than 1100 acres of tallgrass prairie have been reconstructed at Fermilab so far.

"We will be collecting Nodding Wild Onion, Round-Headed Bush Clover and Obedient Plant this year," said Bob Lootens of Roads & Grounds. "We hope to collect as much seed as we can from the more mature prairies in

What's Up with the Linear Collider?

The seventeenth in a series of Fermilab Today stories on the International Linear Collider. The entire series is [available online](#).

JLab a Longtime Leader in Superconducting RF



A superconducting RF cavity for the Spallation Neutron Source is assembled in a clean room of the Test Lab at Thomas Jefferson National Accelerator Facility. (Click on image for larger version.)

Thomas Jefferson National Accelerator Facility in Newport News, Va., site of this week's first meeting of the ILC-America committee, is the established U.S. center for superconducting radiofrequency technology -- and anticipates a significant role in R&D for the technology selected for the proposed International Linear Collider.

"JLab is delighted with the prospect of contributing to these efforts," Jefferson Lab Director Christoph Leemann says. "We believe that the significant technical infrastructure of our Test Lab, and the university and

Friday, October 1

Cream of Wild Mushroom

Blackened Fish Filet Sandwich \$4.75

Southern Fried Chicken \$3.75

Casserole Florentine with Italian

Sausage \$3.75

Eggplant Parmesan Panini \$4.75

Pizza Supreme \$2.75

Baked Potato Bar with Chili \$4.75

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

Weather



Breezy 75°/38°

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

[Secou Level 3](#)

Search

Search the Fermilab Today Archive

Info

Fermilab Today is online at:

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

Send comments and suggestions to

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](#)

[Fermilab Today classifieds](#)

the Main Ring and use it to enrich the younger prairies in the spring."

Roads & Grounds recommends that volunteers wear field clothing and gloves, and if possible, bring hand clippers and paper grocery bags. A picnic lunch will be provided. Because of current security restrictions, non-Fermilab badge holders must register ahead of time by calling 630-840-3303. In case of bad weather, call the Fermilab Switchboard at 630-840-3000. [more information](#)

Fire Prevention Week Starts October 3



Fermilab's Fire Department will display their fire engines in the Horseshoe in front of Wilson Hall on October 6. (Click on image for larger version.)

Fire Prevention Week is October 3 through October 9 this year. The Fermilab Fire Department joins the National Fire Protection Association once again this year to promote this annual event.

On Wednesday, October 6, the Fermilab Fire Department will display their fire engines in the Horseshoe in front of Wilson Hall from 11:30 a.m. to 12:30 p.m. The Fire Department will also have a table set up in the Atrium of Wilson Hall with informational brochures about fire prevention. The Fire Department will visit the Fermilab

industry connections cultivated in the adjacent Applied Research Center, can help jump-start the required effort."

As a partner in the Spallation Neutron Source project, JLab is nearing completion of the superconducting linac and the associated 2-kelvin cryogenic plant. Of the approximately 1000 SRF cavities built worldwide, JLab has performed the last, performance-deciding value-added steps for more than half, and has acted as integrator of the many industrially-provided components that make up an operational "cryomodule" or accelerating unit.

JLab's Continuous Electron Beam Accelerator Facility (CEBAF) is the world's largest installation of SRF accelerating structures. Incremental SRF improvements have raised CEBAF's maximum energy from 4 to 6 GeV, and JLab has developed SRF prototypes for CEBAF's imminent 12 GeV. Meanwhile, accelerating gradients were advanced continuously, from the 5 MV/m of the original CEBAF to the 20 MV/m of the 12 GeV Upgrade.

As a spin-off with multiple applications, JLab operates and continuously advances development of the world's highest-average-power free-electron laser (FEL), which is driven by a small, higher-current cousin of CEBAF. This driver accelerator is the model for SRF-based energy-recovering linac (ERL) efforts worldwide.

Daycare Center on the morning of October 6 to give their annual presentation on fire safety. "It is always a positive learning experience on fire prevention, and it's exciting for the kids," said Fermilab Fire Chief Jack Steinhoff.

The NFPA, the official sponsor of Fire Prevention Week since 1992, selected "Test Your Smoke Alarms" as this year's theme. Approximately 70 percent of deaths from home fires are the result of either not having a smoke alarm or having a smoke alarm that doesn't work. Take the time this week to make sure you have a working fire alarm on each level of your home.



In past years, Sparky the Dog has taught the kids at the Fermilab Daycare Center about fire prevention. (Click on image for larger version.)

In the News



JLab's logo is a line drawing of superconducting RF cavities.

Announcements

Fermilab Speakers Bureau
Secretary of Energy Abraham Spencer's new education initiative calls for Fermilab to have a speakers bureau for scientists to give talks at schools. Many scientists already do this at Fermilab. In the future, if you plan to give a talk at a school, please notify the Education Office. Please send an email to Nancy Lanning with the following information:

- Name
- School/Organization Visited
- What You Did (judged science fair, career day, classroom visit, etc.)
- Number of students
- Date

The Education Office needs to collect this data for all K-12 grades for the education initiative.

Fermilab Association of Rocketry
Monthly Club Launch
The Fermilab Association of Rocketry is having its next monthly club launch on October 2 from noon until 4:00 p.m. [more information](#)

New Classified Ads Posted on Fermilab Today
New [classified ads](#) have been posted on Fermilab Today. A permanent link to the classifieds is located in the bottom left corner of Fermilab Today.

Free English Classes
NALWO-sponsored free English

**From *Nature Magazine*,
September 29, 2004**

An atom-smasher on your desk?

by Mark Peplow

Laser pulses could shrink particle accelerators to just metres across.

The image of particle-physics machines tends to be of huge beasts snaking through kilometres of countryside and costing billions of dollars. But that is about to change.

Cheap table-top particle accelerators could bring high-energy physics into normal laboratories, now that several teams have cleared the major hurdle to shrinking these machines to a manageable size.

[Read more](#)

language classes for beginning and advanced levels are Fridays at the Users Center from 9:30 a.m. to 11:00 a.m

Power Outage News

Cancellations

The following scheduled power outages have been cancelled: October 5, 6, and 7 for Meson areas MS1, 2, 3, MDB, MS6 and 7. The October 8 power outage has also been cancelled for the following Meson substations: ML5, 12, & 14, and for the Meson Cryo Central building.

Transfer Gallery

Scheduled Power Outage on October 2: Feeder 43 work will begin at 7:00 AM and end around 3:00 PM on Saturday; no power to the Transfer Gallery for up to seven and a half hours, but probably less