

Calendar

Friday, Nov. 7
3:30 p.m.
DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
4 p.m.
[Joint Experimental-Theoretical Physics Seminar](#) - One West
Speaker: Zhe Wang,
Brookhaven National
Laboratory
Title: New Measurement of the
 $K^+ \rightarrow p^+ n n\text{-bar}$ Branching
Ratio

Monday, Nov. 10
THERE WILL BE NO
PARTICLE ASTROPHYSICS
SEMINAR THIS WEEK
3:30 p.m.
DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
THERE WILL BE NO ALL
EXPERIMENTERS' MEETING
THIS WEEK
4 p.m.
All Experimenters' Meeting -
Curia II
Special Topics CMS
Commissioning; MINERvA
Test Beam Efforts

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

Weather

 Chance of showers
45°/33°

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

Current Security Status

[Secon Level 3](#)

Wilson Hall Cafe

Special Announcement

Physics conference affects parking, cafeteria service

Today and tomorrow, about 600 physicists and physics undergraduates will attend at Fermilab the 2008 Quadrennial Congress of the physics honor society Sigma Pi Sigma and the Society of Physics Students. Employees planning to eat in the cafeteria today should have lunch early and aim to leave the lunch area by 12:45 p.m. Parking near Wilson Hall will be difficult. [More information](#) on the event is available in the Nov. 5 issue of *Fermilab Today*.

Feature

Fermilab-based cancer center gets financial boost



An illustration of how
neutron therapy
attacks cancer cells.

Cutting-edge cancer
treatment connected to
research done at
Fermilab got a boost
last month.

Democratic U.S. Rep.
Bill Foster, Sen. Dick
Durbin and Rep. Danny
Davis [worked to secure](#)
\$6 million in funding for
proton and neutron
therapy.

The Fermilab-based
Institute for Neutron Therapy, which is
managed by Northern Illinois University in
cooperation with Fermilab and Nuclear
Oncology Medical Care, will receive \$1.2
million of the funds. The Northern Illinois
Proton Treatment and Research Center under
construction in the DuPage County High Tech
Park adjacent to Fermilab will receive \$4.8
million.

The Fermilab connections:

Fermilab has treated more than 3,000 patients
since it began offering [neutron therapy](#) in
1976. About 8,000 patients have been treated
worldwide using neutron therapy.

Presently, only Fermilab and the University of

From iSGTW

Security through collaboration, part I: Today's cyber security climate



A map depicting much of the U.S. research
cyberinfrastructure (click image for full map and
legend). *Image courtesy of NCSA.*

Editor's note: Randal Butler, Co-Director of
the CyberSecurity Directorate at the National
Center for Supercomputing Applications,
University of Illinois, contributed this article,
the first of a two-part series.

The grid offers many advantages for
computing, as we all know. But it offers one
singular disadvantage: a grid is only as strong
as its least secure site.

The cyber attacks we see today typically span
multiple systems, sites and even countries, as
attackers use increasingly sophisticated
methods both to gain access and to obfuscate
their location. FBI sources tell us that today's
attacks target specific projects, technologies
and organizations, and take advantage of
established trust relationships. Further,
organized crime and nation-states are often
behind these attacks.

A well-documented attack of this type in 2004
from outside the U.S. impacted national
centers like NCSA, university computing
facilities, DOE sites, and industry not only in
the United States, but throughout Europe. The
intruder installed SSH trojans, harvested
usernames and passwords, and used them to
gain further privileges and access to other
systems. In many cases the intruder managed
to carry out these activities without disrupting
the system, allowing him to proceed
undetected. The attack resulted in extended
outages at affected sites over the course of

Friday, Nov. 7

- Old fashioned ham & bean
- Philly style chicken
- Chicken pot pie
- Smart cuisine: baked fish over rice
- Roasted veggie & provolone panini
- Assorted sliced pizza
- Baked potatoes

[Wilson Hall Cafe Menu](#)[Chez Leon](#)

Wednesday, Nov. 12

Lunch

- Eggplant parmesan
- Romaine, walnut & apple salad
- Espresso coupe

Thursday, Nov. 13

Dinner

- Closed

[Chez Leon Menu](#)

Call x4598 to make your reservation.

[Archives](#)[Fermilab Today](#)[Result of the Week](#)[Safety Tip of the Week](#)[ILC NewsLine](#)[Info](#)

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Send comments and suggestions to: today@fnal.gov

Washington provide the treatment. Northern Illinois University manages the non-research element of Fermilab's therapy center.

Fermilab produces neutrons by steering the surplus from the proton beam in the linear accelerator into a beryllium target. Low-carbon steel blocks fixed in concrete shape the neutrons into a narrow beam, which are then targeted at the cancerous tumor.

Fermilab has had a less direct, but equally important influence on proton therapy.

Fermilab designed and built the proton accelerator that was used by the nation's first hospital-based treatment center, [Loma Linda Proton Treatment Center](#) in California.

Fermilab helped [pioneer](#) the use of particle beams from a compact proton accelerator to treat cancer.

Current and former Fermilab employees consulted on the proton treatment center under construction in West Chicago, which Northern Illinois University will oversee.

The Northern Illinois Proton Treatment and Research Center will be one of fewer than a dozen such centers in the world by the time it opens in 2010. The 130,000-square-foot NIU treatment and research facility will treat up to 1,500 patients a year.

-- Tona Kunz

[In the News](#)

Where will new Fermi telescope find dark matter?

From *New Scientist*, Nov. 5, 2008

It may be the closest thing astronomers have to a betting pool: Where will NASA's new Fermi gamma-ray telescope detect its first hint of dark matter?

Some believe the best chance of a detection lies in nearby dwarf galaxies, since they should contain dense nuggets of dark matter that could be relatively easy to pinpoint.

But a new study argues that a diffuse dark matter 'halo' surrounding the Milky Way offers an even better shot at glimpsing the mysterious stuff.

[Read more](#)

several months.

[Read more](#)[Announcements](#)[Have a safe day!](#)

Fermilab Kyuki-Do begins Nov. 10
Fermilab's next session of Kyuki-Do begins Nov. 10. Kyuki-Do is a Korean martial art similar to Taekwondo. Participants can learn balance, power, and grace. Classes take place for six weeks on Monday and Wednesdays from 5 - 6 p.m. in the Recreation Facility in the Village. To join, register through the Recreation Office. You must have a Recreation Facility membership.

Join Fermilab volleyball, training
Fermilab's winter volleyball league will begin game play on Nov 17. Interested volleyball players can join the league's practice games in the Fermilab Village gym on Mondays from 6-9 p.m. Players can join the league teams or create new ones. To participate in the league you must have a valid Fermilab gym membership. Call Sergey Los, league convener at x8313 or visit the [Web site](#) for more information.

NALWO Thanksgiving feast Nov. 17
NALWO, Fermilab's women's organization, will host "Thanksgiving Across America," a Thanksgiving feast on Monday, Nov. 17, from 11 a.m. – 1 p.m. at Chez Leon in the Users' Center. NALWO members will prepare food and chefs will describe how to prepare traditional dishes. Contact the Housing Office at x3777 or Rose Moore at (630) 208-9309 with questions. Photo identification is required to enter the laboratory.

Director's volunteer award Nov. 25
The Director's volunteer award reception, which was cancelled Tuesday due to the power outage, has been rescheduled. The reception will take place at 5 p.m. on Tuesday, Nov. 25 on the second floor crossover.

Fermilab barn dance Nov. 9
A Fermilab barn dance will take place on Sunday, Nov. 9 in the Kuhn Village Barn at 6:30 p.m. with music by the Cosmic Otters and calling by Paul Watkins. Visit the [Web site](#) for more information.

Classifieds

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

[Additional Activities](#)

