

## Furlough Information

New furlough information, including an [up-to-date Q&A](#) section, appears on the [furlough Web pages](#) daily.

## Calendar

### Thursday, Feb. 21

THERE WILL BE NO PHYSICS AND DETECTOR SEMINAR THIS WEEK

2:00 p.m.

[Computing Techniques](#)

[Seminar](#) - FCC1

Speaker: D. Yocum, Fermilab  
Title: The FermiGrid High Availability System

2:30 p.m.

[Theoretical Physics Seminar](#) -

Curia II

Speaker: C. Oleari, Università di Milano-Bicocca

Title: Matching NLO

Calculations with Parton

Showers: The PPositive-Weight Hardest Emission Generator (POWHEG)

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4:00 p.m.

[Accelerator Physics and](#)

[Technology Seminar](#) - 1 West

Speakers: J. Patrick, B.

Hendricks, C. Briegel -

Fermilab

Title: A New Vision for the

Evolution of Control

### Friday, Feb. 22

10:00 a.m.

PPD/Neutrino Department

Physics Seminar - Racetrack /

WH-7X0

Speaker: A. Afanasev,

Hampton University

Title: Radiative Corrections for

Lepton Scattering

3:30 p.m.

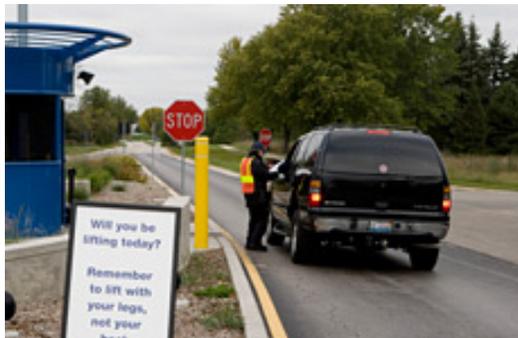
DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4:00 p.m.

## Contest

### Play safe, win Fermilab gear



The first batch of safety signs went up at laboratory entrances October 2007.

Have you seen those safety signs at the entrances to the laboratory, and said, "I can do that." Well, here is your chance to prove it. Show off your safety know-how and catchy wit to win a prize in Fermilab's second safety slogan contest.

Messages should focus on how to prevent accidents on laboratory property or how to protect the environment through recycling, conservation and preservation. Slogans should have Fermilab specific themes and not general safety tips.

Accident avoidance and environment-friendly messages will appear on display signs at the three site entrances.

Some of the slogans posted so far include:

- Make working safely your standard model.
- Beamline and spine, keep them aligned.
- Many quantum worlds. Be safe in this one.

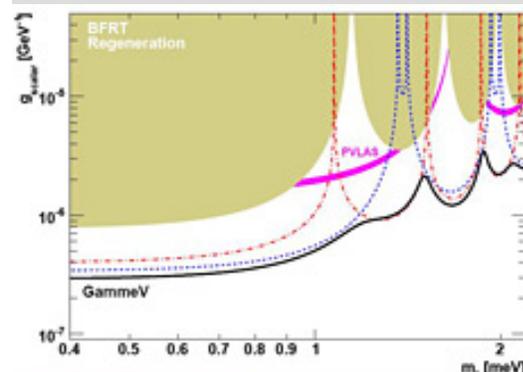
E-mail short, thought-provoking slogans to Tim Miller, [tmiller@fnal.gov](mailto:tmiller@fnal.gov) by Wednesday, Feb. 27.

-- Tona Kunz

## Feature

## Special Fermilab Result of the Week

### Axion result all washed up



New limits from the GammeV collaboration excluding a region of axion-like particles in the milli-eV mass range versus the coupling to photons. These limits surpass earlier regeneration limits from BFRT and exclude the suggested region of interest from PVLAS results.

Members of the GammeV experiment at Fermilab, competed with other research teams across the globe in a race to refute claims of a 2006 discovery of an axion particle, a possible dark matter candidate.

GammeV collaborators proved that the reported signature of the new particle by the Italian PVLAS experiment was an anomaly, not a discovery. And GammeV collaborators refuted the data in near record time on a shoestring budget.

It took the 10-member team less than a year to propose the experiment, get it approved and produce results, which will appear soon in *Physical Review Letters* and online at [gammev.fnal.gov](http://gammev.fnal.gov). GammeV borrowed parts from across the laboratory including an AD laser, a Tevatron dipole magnet and QuarkNet circuit boards to conduct a \$30,000 experiment. The experiment was conducted in TD's Magnet Test Facility.

Physicists shot a laser through a bore of the magnet and onto a mirror mounted on a welded, light-tight cap, creating the equivalent of a brick wall. The experiment was studying whether a particle of light, called a photon, could shift into an axion particle that can pass through the glass mirror and cap and return to a photon on the other side.

[Joint Experimental-Theoretical Physics Seminar](#) - One West

Speaker: B. Hoeneisen, Universidad San Francisco de Quito

Title: Measurement of CP Violation with B-Mesons at DZero

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

**Weather**



**Mostly Cloudy 29°/11°**

[Extended Forecast](#)

[Weather at Fermilab](#)

[Current Security Status](#)

[Secon Level 3](#)

**Wilson Hall Cafe**

**Thursday, Feb. 21**

- Southwestern chicken tortilla
- Philly-style cheese steak
- Garlic herb roasted pork\*
- Mediterranean chicken packages
- Southwestern turkey wrap
- Assorted pizza slices
- Marinated grilled chicken Caesar salad\*

**\*Carb restricted alternative**

[Wilson Hall Cafe menu](#)

**Chez Leon**

**Wednesday, Feb. 27**

**Lunch**

- Wild Mushroom Strudel
- Salad of Field Greens w/ Tomatoes, Cucumbers & Onion
- Cold Lemon Soufflé

**Thursday, Feb. 28**

**Dinner**

- Sancocho w/Pastetobos
- Roast Suckling Pigs
- Chayote Guisado
- Rice & Pigeon Peas
- Flan & Tropical Fruit

[Chez Leon menu](#)

Call x4598 to make your reservation.

**Archives**

## Getting stuck while going up: Elevator safety tips



Wilson Hall building manager John Kent works with Fermilab firefighters and security to open a stuck elevator door in 2007.

Remain calm. Don't panic. Push the call button. According to Wilson Hall building manager John Kent, these are the first steps to take if you find yourself stuck in an elevator. There are twenty passenger elevators on the Fermilab site and every once in a while, one will get stuck.

Kent said that incidents occur far less frequently than people think. "Contrary to common folklore, someone getting trapped in elevators on site is in fact rare."

Elevators stop for a variety of reasons. "Any component in the door can cause stop elevator service," he said. Another thing that can cause the elevator to temporarily stall is people jumping up and down in it.

FESS and maintenance contractors keep a close eye on the elevators and take precautions to reduce the number of incidents. Kent said that the elevators receive semi-annual, independent inspections and that repairs are performed rapidly.

Kent added that if an elevator does stop moving between floors, the best thing to do is to stay calm and press the emergency call button, located on the floor selection panel. Some elevators also have a telephone handset that automatically dials the Fermilab Communication Center. After a person in the elevator pushes the button, the operator at the Communication Center notifies the fire department, which responds immediately. To open the elevator door, firefighters insert a special key into the door from the outside. That key disengages the door lock, allowing firefighters to open the door manually.

Once the elevator is vacant, it is marked as out of service. The elevator technicians troubleshoot and diagnose the problem. Once



The GammeV collaboration includes (from left): Jonghee Yoo, Dick Gustafson, Peter Mazur, Al Baumbaugh, Ray Tomlin, Yang Xi, Yilda Irizarry-Valle, Aaron Chou, William Wester and Jason Steffen (not shown).

The GammeV experimenters fired a laser 6 million times, looking for the new particle. If the particle existed, as PVLAS had suggested, a regenerated photon would have shown up hundreds of times. GammeV researchers found no evidence that the light passed through the wall. In fact, additional data by PVLAS also shows no evidence for the new particle.

The GammeV result disputes claims that an axion-like particle might have caused light to behave strangely in a magnetic field, causing its polarization to rotate. The axion got its name in the late 1970s after a brand of detergent called Axion. Physicists took the name in the hopes that the discovery of an axion would "clean up" some mysteries of theoretical particle physics. Later, it has been shown that the axion might help explain approximately 90 percent of the universe called dark matter.

[Result of the Week Archive](#)

**Announcements**

[Have a safe day!](#)

**Children's Summer Day Camp registration due**

Registration forms for the onsite day camp for children of Fermilab employees are due by 5 p.m. Feb. 28. The camp for ages 7 through 12 consists of three separate three-week sessions: session I: June 16 - July 3, session II: July 7- July 25, session III: July 28 - August 15. The camp held in the lower level of the Kuhn Barn in the village runs from 7:30 a.m. to 5:30 p.m. You may choose any or all of the sessions. The fee for each day camp session is \$295 per camper. A \$125.00 deposit per session per camper must accompany the

## [Fermilab Today](#)

## [Result of the Week](#)

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

## [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)

fixed, the elevator is evaluated before being put back in service.

-- *Haley Bridger*

### In the News

## Will we ever 'Jump'?

From *abcnews*,  
Feb. 14, 2008

David Rice is a man with a secret, one that he exploits to go from catching a killer wave in Fiji to bedding a gorgeous blonde in London, just by thinking about it. In the new film "Jumper," which opens Thursday, Rice, played by Hayden Christensen, has a genetic mutation that allows him to "teleport" from place to farflung place instantly, just by thinking about it. While teleportation has figured prominently in science fiction, from cries of "Beam me up, Scotty" on "Star Trek" to "apparitions" in the "Harry Potter" books, physicists say that teleportation is possible now, at least on a small scale, and the applications for the future are far from fictitious.

But pop culture's depictions of "beaming" people from one place to another have significantly mangled the perception of what's actually possible under the laws of physics. According to physicists, teleportation in its most basic sense is not about sending matter, but about sending information.

"Teleportation is a protocol for sending quantum states from one place to another," said Jeff Kimble, a quantum physics professor at the California Institute of Technology.

[Read more](#)

### In the News

## Construction brings metal theft

From *Kane County Chronicle*,  
Feb. 17, 2008

The phenomenon of stealing large pieces of metal – mostly copper – has risen in recent years with new subdivisions popping up in Kane County, police said.

Sheriff's Lt. Pat Gengler said thieves also focused on scrap metal because of its price.

"It's worth a lot of money," he said.

Aside from scrap metal, copper fittings, wire and appliances are reported stolen to police from new home construction sites, Gengler

registration form. Registrations will be accepted at the Recreation Office, M.S. 126. Applications go into a lottery held on Feb. 29. An information booklet and registration form can be found on the Recreation Website.

## Applications due for 2008 CERN-Fermilab Hadron Collider school

Applications for the 2008 CERN-Fermilab Hadron Collider Physics Summer School are due Feb. 29. The school takes place August 12-22, 2008, at Fermilab, and focuses on training advanced graduate students and young postdocs. Both theorists and experimentalists should apply. The list of lectures and lecturers has been posted at the [school Web site](#). [Click here](#) more information.

## Employee art show - applications due Feb. 25

"Hidden Talents: Fermilab Employee Art Show" will be on display, March 19 - May 14, 2008. Intent applications are due Feb. 25, and forms are available in the Art Gallery on the stand near Curia II or on the [Web](#).

## Improve your 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 March 4. [Click here](#) for more info and to enroll.

## Missing vacuum sealer returned

An anonymous person returned the vacuum bag sealer to KTeV hall. The sealer had gone missing and was needed to Tpackage the Cesium Iodide Crystals in the KTeV blockhouse. Thank you to the person who returned it.

## [Additional Activities](#)

said.

[Read more](#)

**Editor's note:** If you observe suspicious activities or theft on the Fermilab site, immediately call security at x3414. If it is an emergency, call x3131.