

## Calendar

## Feature

## Result of the Week

### [Have a safe day!](#)

Thursday, Nov. 11

2 p.m.

All-Hands meeting - Ramsey Auditorium

2:30 p.m.

[Theoretical Physics Seminar](#) -

Curia II

Speaker: Takemichi Okui, Florida State University

Title: Viable Gravity Mediation

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

[Accelerator Physics and Technology Seminar](#) - One

West

Speaker: Hengjie Ma, Brookhaven National Laboratory

Title: Low-Level RF

Development Experience from SNS and NSLS-II

Friday, Nov. 12

2 p.m.

LHC Physics Center: Topic of the Week Seminar - Sunrise, WH-11SE

Speaker: Jesse Thaler, Massachusetts Institute of Technology

Title: Goldstini at the LHC

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

Joint Experimental-Theoretical Physics Seminar - One West

Speaker: Jonathan Hays, Imperial College London

Title: Recent Results in SUSY Higgs Searches at DZero

8 p.m.

[Fermilab Lecture Series](#) -

Auditorium

Tickets: \$7

Speaker: Dr. Neil Gershenfeld, Massachusetts Institute of Technology

## An important message from Director Pier Oddone

I am announcing today, November 11, a voluntary separation offer to bring Fermilab operations into balance with the resources we expect this fiscal year, FY11. The VSO is a financial package that the laboratory will offer to a subset of Fermilab employees in order to accomplish a necessary reduction in the size of the Fermilab staff.



Pier Oddone

We are going into the new fiscal year with funding that is at best the same as last year's, but without the benefit of the \$10M carryover we were able to use in FY10. This creates a significant shortfall for the laboratory as a whole. We have reduced spending for materials and supplies as much as possible, but we still have a substantial gap in the funds for salaries, wages and benefits. To bring the funding into balance, we hope that up to 90 employees will take the opportunity afforded by the VSO. A [website](#) explaining the VSO includes a means to receive timely answers to your questions.

Like the VSO we offered in 2008, the program will offer a separation package only to a subset of the staff. Their job assignments have enough flexibility to allow us to continue laboratory operations by reassigning responsibilities or eliminating the work. There are groups where we need everyone and cannot operate with any reduction in staff. For other groups, we may be able to offer the separation to the entire group but be able to accept only one or two individuals based on seniority.

If you are eligible for the VSO, you will shortly receive a package via e-mail with the benefit details and timelines. It will come from Kay Van Vreede at [VSO10@fnal.gov](mailto:VSO10@fnal.gov).

An All-Hands Meeting will take place at 2 p.m. today in Ramsey Auditorium. Live streaming

## No sting in study of three "b"s



There is a distinct danger of getting stung when near three bees. In contrast, events containing three "b"s could be the first signs of a major discovery.

With all the studies and media coverage about the searches for the Higgs boson, it might surprise you that there is an enormous amount of information that we don't know. For instance, while the Standard Model suggests that there is a single Higgs boson, there are viable extensions of the Standard Model that incorporate the principle of [supersymmetry](#). One theory that incorporates the principle of supersymmetry suggests that there is not one Higgs boson, but rather five. (There are more complicated extensions that predict even more bosons, but DZero physicists restricted this analysis to the most minimal supersymmetric extension of the Standard Model.)

When compared to the Standard Model, supersymmetry's technical details strongly enhance the decay of the theorized supersymmetric Higgs bosons into bottom quarks (also known as b quarks). This theory suggests that 90 percent of supersymmetric Higgs bosons will decay this way. However, the production of bottom quarks by the strong nuclear force overwhelms any realistic rate for Higgs production. In order to enhance Higgs production compared to the ordinary production of bottom quarks, DZero physicists looked for associated production of a Higgs boson with a [bottom quark](#). Thus, the interesting signature was events in which three [jets](#) were produced, all initiated by bottom quarks.

This [analysis](#) was consistent with Standard

Title: [How to Make \(Almost\) Anything](#)

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

[Upcoming conferences](#)

[Campaigns](#)

[Take Five](#)

[Tune IT Up](#)

[Weather](#)

 Partly sunny  
66°/47°

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

[Current Security Status](#)

[Secon Level 3](#)

[Wilson Hall Cafe](#)

Thursday, Nov. 11  
- Breakfast: apple sticks  
- Santa Fe black bean soup  
- Steak tacos  
- Chicken Wellington  
- Chimichangas  
- Baked ham & Swiss on a ciabatta roll  
- Assorted sliced pizza  
- Crispy fried chicken salad

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

video of the meeting will be available [here](#).

Special Announcement

**Veterans Day celebration 11:30 a.m. today in Kuhn Barn**



AD's Greg Vogel took this photo of the flag display in honor of Veterans Day on Rotary Hill in Naperville in 2009.

Veterans at Fermilab will host a Veterans Day celebration in Kuhn Barn from 11:30 a.m. to 1:30 p.m. today. All veterans are welcome.

Sergeant Matt Duquette, a Marine squad leader with tours in Iraq and Afghanistan, and Lieutenant Henry Flora, a WWII Navy veteran who served in the South Pacific Theater, will recount their experiences.

East Aurora High School's Navy Junior ROTC will present the colors. Fermilab employee and Veterans Commander and Retired Air Force Colonel Gary Leonard will give the welcome.

Veterans at Fermilab will also play "Taps" for their departed brethren and will have a moment of silence for victims of the Fort Hood tragedy.

Tickets for lunch are \$8 and will be available at the door. Contact Greg Gilbert, x6835, for more information.

In the News

**Letter to House appropriators urges increased funding for DOE science programs**

From *FYI: The AIP Bulletin of Science Policy News*, Nov. 8, 2010

When the House Energy and Water Development Appropriations Subcommittee approved its FY 2011 funding bill this summer, they recommended essentially flat funding (-0.1 percent) for the Office of Science. A group of 108 corporations, universities, and

Model predictions, suggesting no observations of Higgs bosons. However, this is a real measurement, which means that, compared to the prediction, we see a few extra events at some masses and deficits at others. This is consistent in a scientific context; these variations could occur by chance. Even so, we do see a slight excess of Higgs boson candidates at a mass slightly more than 120 times the mass of the proton. Since there is a lot of indirect evidence pointing to this mass range for the Higgs boson, this excess has raised a few eyebrows. It might only be a statistical fluke, but you can rest assured that this analysis will get additional attention.

This analysis will be presented at Friday's Wine and Cheese seminar at 4 p.m. in One West.

- Don Lincoln



These physicists contributed to this challenging analysis.



Guennadi Borisov  
Lancaster Univ.  
UK  
Bill Cooper  
Fermilab  
All Ito  
Fermilab

In order to make best use of our data, it is imperative that we have a very precise understanding of the position of our detector. These physicists, along with the Fermilab alignment and metrology group, are responsible for determining the alignment of the components of DZero.

Accelerator Update

Thursday, Nov. 11  
Dinner  
Closed

Wednesday, Nov. 17  
Lunch  
- Chicken breast stuffed w/  
sundried tomatoes & goat  
cheese w/ shallot thyme sauce  
- Orzo  
- Sautéed spinach  
- Italian cream cake

#### [Chez Leon Menu](#)

Call x3524 to make your  
reservation.

#### Archives

#### [Fermilab Today](#)

#### [Director's Corner](#)

#### [Result of the Week](#)

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

#### [CMS Result of the Month](#)

#### [User University Profiles](#)

#### [ILC NewsLine](#)

#### Info

#### [Fermilab Today](#)

is online at:

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Send comments and  
suggestions to:

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

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Today*

associations have just sent a letter to House Appropriations Committee Chairman David Obey (D-WI) and Ranking Member Jerry Lewis (R-CA) urging them “to find a way to provide the increased funding requested for DOE science programs.”

The American Institute of Physics and the American Physical Society were among those signing this letter which was sent by the Energy Sciences Coalition.

The Obama Administration requested \$5,121.4 million for the Office of Science for FY 2011, which after adjusting for previous earmarks, is an increase over the previous year of 6.1 percent. A DOE budget document explains “The FY 2011 request supports the President’s Plan for Science and Innovation, which encompasses the entire SC [Office of Science] budget, as part of a strategy to double overall basic research funding at select agencies. As part of this plan, the budget request supports the training of students and researchers in fields critical to our national competitiveness and innovation economy, and supports investments in areas of research critical to our clean energy future and to making the U.S. a leader on climate change.”

The Senate Appropriations Committee recommended a 2.2 percent increase in the FY 2011 budget for the Office of Science.

[Read more](#)

Nov. 8-10

- Three stores provided ~35 hours of luminosity
- FESS continues to repair CUB boiler #2
- Tevatron made access to repair sector D11 power lead
- Pbar magnet (PMag) ground faulted and replaced
- Pbar LCW leaks fixed
- Tevatron E1 wet engine repaired

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

#### Announcements

#### Latest Announcements

[Tango at Fermilab through Dec. 1](#)

[Book Fair Nov. 17 & 18](#)

[Cisco AnyConnect VPN client will be unavailable today intermittently](#)

[Fermilab winter volleyball league](#)

[Toastmasters - Nov. 18](#)

[Indian Creek Road closed until 3:30 pm Thursday](#)

[Help ES&H: take commuting and travel survey](#)

[Annual enrollment: deadline Nov. 22](#)

[Free CERN LHC book](#)

[Free noontime concert today in Ramsey Auditorium](#)

[Bullying: It's everyone's problem - Nov. 18](#)

[Nov. 22 deadline for The University of Chicago Tuition Remission program](#)

[Pedestrian safety awareness for families](#)

[Pedestrian safety at crosswalks](#)

[Accelerate to a Healthy Lifestyle program through Dec. 31](#)

[Chicago Blackhawks November discount tickets](#)

[Submit an announcement](#)