

Calendar

Friday, Jan. 16

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

THERE WILL BE NO JOINT

EXPERIMENTAL-

THEORETICAL PHYSICS

SEMINAR THIS WEEK

8 p.m.

[Lecture Series](#) - Auditorium

Tickets: \$5

Speaker: Dr. May Berenbaum,

University of Illinois

Title: BSI: The Case of the

Disappearing Bees

Saturday, Jan. 17

1-5 p.m.

[Open House](#) - Atrium, 15th floor

Monday, Jan. 19

Happy Martin Luther King Day!

Tuesday, Jan. 20

2:30 p.m.

Particle Astrophysics Seminar

- Curia II (NOTE DATE)

Speaker: Eduardo Rozo, Ohio

State University

Title: Self-Calibrated

Cosmological Constraints from

the SDSS maxBCG Cluster

Sample

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

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

Weather



Cold
5°/3°

[Extended Forecast](#)

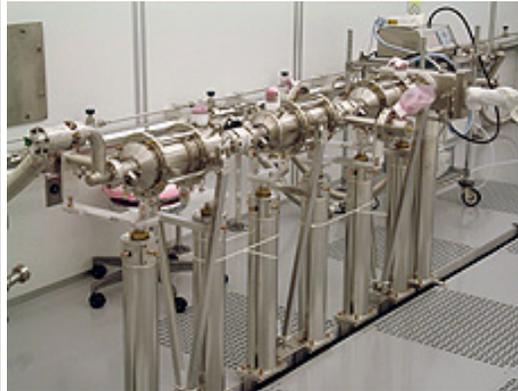
[Weather at Fermilab](#)

Current Security
Status

[Secon Level 3](#)

From *ILC Newsline*

Harmonics of acceleration



The assembled three-cavity string for the third-harmonic cryomodule.

The majority of NewsLine readers are scientists – most of you of the experimental kind. So be honest: how often during the last few weeks, when listening to carols, plucking the strings of your old guitar that you only get out during the holidays or cringing at a dissonant brass band, did you think about the physics and the maths of music? Go to the ILCT-MDB Horizontal Test Stand at Fermilab now and you can experience a perfect third harmonic: that of a string of cavities being tested and assembled into a cryomodule.

The 3.9-Gigahertz "third harmonic" cryomodule is an essential ingredient to the FLASH free-electron laser at DESY in Hamburg, Germany, and one of Fermilab's contributions to the TESLA Technology Collaboration TTC that planned and built FLASH as a test facility for the superconducting radiofrequency technology needed for the ILC. Within FLASH, it will sit in front of the regular 1.3-Gigahertz accelerating cryomodules and play an essential role in the sorting and squeezing of the electron bunches. Unlike the regular ones that are supposed to accelerate the particle bunches as efficiently as possible, this module actually makes the energy distribution within the bunch more linear, which reduces the longitudinal emittance, thus leading to the production of brighter laserlight for users at the other end.

-- Barbara Warmbein

[Read more](#)

From *iSGTW*

Tier-3 computing centers expand options for physicists



Professors Nural Akchurin, Sung-Won Lee, Alan Sill and graduate student Vanalet Rusuriye examine data transfer and local cluster performance for the Tier-3 center at Texas Tech University while remotely monitoring parameters of the LHC accelerator and CMS experiment. *Image courtesy of Alan Sill, TTU.*

Researchers at Texas Tech University work more than 5,000 miles from CERN, but they will have just as much chance of making new physics discoveries using the data collected at the Large Hadron Collider as scientists in Switzerland.

Texas Tech runs a Tier-3 computing center that is part of the CMS collaboration, allowing physicists there to host and analyze data from the experiment locally. Tier-3 centers make up one of four tiers in the LHC Computing Grid.

"Tier-3 sounds like the bottom of the chain," said Alan Sill, a senior scientist who runs the center, "but in a way it's the top of the chain. It's the first level at which physicists have access to data under their own control."

A single Tier-0 site, at CERN, processes raw information and sends it around the world to Tier-1 centers. CMS's seven Tier-1 centers reprocess the data and break it into subsamples to send to about 35 CMS Tier-2 centers. Tier-2 centers host data for the experiment and devote much of their time to running centralized simulations, but also provide resources for individual physicists' analysis jobs.

-- Kathryn Grim

[Read more](#)

Wilson Hall Cafe

Friday, Jan. 16

- Smart cuisine: chunky vegetable soup w/orzo
- Buffalo chicken wings
- Cajun breaded catfish
- Teriyaki pork stir-fry
- Honey mustard ham & Swiss panini
- Assorted sliced pizza
- Smart cuisine: *carved turkey

*Carb restricted alternative

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

Wednesday, Jan. 21

Lunch

- Spiced cornish hens
- Broccoli & rice
- Berry tart

Thursday, Jan. 22

Dinner

Closed

[Chez Leon Menu](#)

Call x3524 to make your reservation.

Archives**[Fermilab Today](#)**[Result of the Week](#)[Safety Tip of the Week](#)[ILC NewsLine](#)**Info**Fermilab Today is online at: www.fnal.gov/today/Send comments and suggestions to: today@fnal.gov**Announcement****Register now for Fermilab Family Open House Jan. 17**

This year's Fermilab Family Open House will take place from 1 to 5 p.m. on Saturday, Jan. 17.

The Open House offers family-style, hands-on activities, science shows and behind-the-scenes tours of the Linac Gallery, the CDF assembly building and the Meson lab. The event will offer hourly cryogenics shows by Jerry Zimmerman as "Mr. Freeze," kids racing against a gravity accelerator, the popular Ask-a-Scientist session on the 15th floor of Wilson Hall and tours of the linear particle accelerator and two research areas on site.

The event is free of charge. More information and advance registration is available [here](#).

In the News**House economic stimulus bill would provide billions in new science, energy and education dollars**From *AIP FYI*, Jan. 15, 2009

This morning the House Appropriations Committee, chaired by Rep. Dave Obey (D-WI) released a 13-page summary of the American Recovery and Reinvestment Bill of 2009. The legislation would provide billions of dollars in new science, technology, energy and education funding this year. In doing so, it reflects the views of House Speaker Nancy Pelosi (D-CA) and the Democratic leadership on the role of science, technology, and innovation. As detailed in FYI #3, Speaker Pelosi stated, "We all know that in business or in science or in education, capital attracts talent. You have to have the labs. And talent attracts capital. And so we want to make very wise investments in this recovery package so it is about innovation." This \$825 billion proposed bill demonstrates the leadership's commitment to their approach.

The following are excerpts from the House Appropriations Committee's summary:

"The economy is in a crisis not seen since the Great Depression.

"Credit is frozen, consumer purchasing power is in decline, in the last four months the

Photo of the Day**In flight**

AD's Marty Murphy submitted this photo of a bald eagle taken early in the morning on Dec. 19.

Announcements**Benefits Update**

[Changes to the Family and Medical Leave Act Jan. 16](#)

Travel Update

[Changes in U.S. admission procedure](#)

[Have a safe day!](#)

[Register now for Fermilab Open House Jan. 17](#)

[Weekly Time Sheets are due on Friday](#)

[International Folk Dancing, Jan. 15 in Ramsey Auditorium](#)

[Outlook 2007 New Features classes scheduled Jan. 15 and Feb. 3](#)

[Barn Dance Jan. 18](#)

[Intermediate / Advanced Python Programming - Jan. 27 - 29](#)

[ACU bill pay demonstration Jan. 29](#)

[Conflict Management & Negotiation Skills class being offered Feb.3](#)

[PowerPoint 2007: New Features class being offered Feb. 3](#)

[Facilitating Meetings That Work class being offered Feb. 4](#)

[Word 2007: New Features class being](#)

country has lost 2 million jobs and we are expected to lose another 3 to 5 million in the next year.

[Read more](#)

[offered Feb. 4](#)

[Excel 2007: New Features class being offered Feb. 4](#)

[Interpersonal Communication Skills class being offered Feb. 5](#)

[Additional activities](#)

[Submit an announcement](#)

Classifieds

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