Fermilab Today

Thursday, March 20, 2008

Furlough Information

Reminder:
An IDES representative will conduct group meetings at 11 a.m. and noon in the Wilson Hall One West conference room on Friday, March 21, and Friday, March 28.

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

Layoff Information

New information on Fermilab layoffs, including an up-to-date Q&A section, appears on the layoff Web pages daily.

Calendar

Thursday, March 20
1 p.m.
Physics and Detector Seminar - West Wing, WH10NW
Speakers: J. Brau, University of Oregon, J. Jaros, Stanford Linear Accelerator Center
Title: Report from the GDE/ ACFA Meeting at Sendai
2:30 p.m.
Theoretical Physics Seminar - WH-3NW (NOTE LOCATION)
Speaker: A. Atre, Fermilab
Title: Heavy Quarks Above the "Top" at Hadron Colliders
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

Friday, March 21
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
4:00 p.m.
Joint Experimental-Theoretical Physics Seminar - One West

Feature

See your co-worker's creative side at Employee Art Show

Artwork from Fermilab employees and their families will remain on display through May 14.

Todd Johnson plans to kick off tomorrow's employee art show reception with a bang. The AD physicist plans to strike an electrically charged artwork to release the stored energy in the form of a small lightning bolt and a loud bang, creating a Lichtenberg figure.

His artwork will help mark the beginning of this year's Employee Art Show reception, which will take place in the Fermilab Art Gallery from 5-7 p.m. today. This year's art show features 103 pieces by Fermilab employees and their families, including the accelerator-based artwork by Johnson.

Art Gallery curator Georgia Schwender said the exhibit is the largest and most impressive since the show was begun by founding director Robert Wilson.

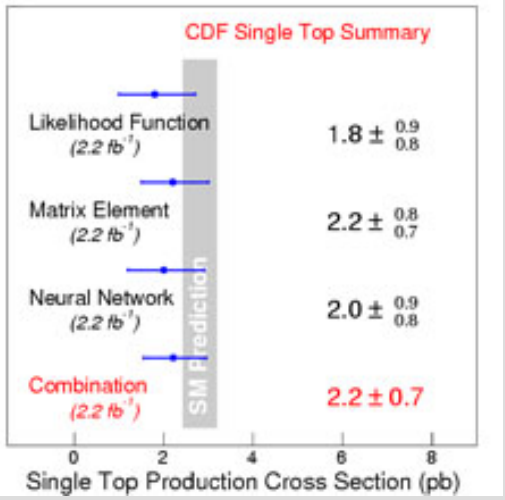
"The quality of the art is exceptional," she said. "Every year it just gets better." "Hidden Talents - Employee Art Show" recognizes the creativity of Fermilab employees. "Keeping the arts in work is really important," Schwender said. "Our employees just don't do one thing, they have more interests than that, and it is really important to keep them engaged."

"The sharing of artistic expression among employees is a boost not only to the work environment but to the spirit of Fermilab as well," Schwender said.

Work in this year's show spans several artistic media, including, sculpture, glass work, painting, photograph and more.

Fermilab Result of the Week

CDF seeks sexy singles



Single top quark production rate measured by three individual analyses, as well as CDF's combined result obtained from a super-analysis, based on the outcomes of the individual analyses. The gray band indicates the prediction by the Standard Model.

Twelve years after the discovery of top quark pairs, which are produced through the strong force, we still know very little about how single top quarks are produced. Top quarks, which are the heaviest observed particles, may be produced one at a time, but only through the weak force. Studying single top production may therefore reveal secrets about the weak force or about the families of quarks.

CDF physicists recently hoped to solve this mystery with a combined set of analyses so powerful that there was a one in two chance to make an observation of this weak force production process at the level of five standard deviations. This would qualify as a solid discovery. Unfortunately, the observed number of single top candidate events was low, but fell well within the expected range predicted by the Standard Model. Nevertheless, the measurement yielded solid evidence and a precise measurement for the production rate of those sexy single particles.

Seeking single top quarks is a lot like looking for needles in a big stack of pins. Physicists expect single top events as few and far between. They expect background events, which resemble single top signal events to

Speaker: S. Soldner-Rembold, University of Manchester
Title: DZero Physics Highlights from Moriond

Click here for NALCAL, a weekly calendar with links to additional information.

Weather

Mostly sunny 46°/28°

Extended Forecast
Weather at Fermilab

Current Security Status

Secon Level 3

Wilson Hall Cafe

Thursday, March 20
- Southwestern chicken tortilla
- Philly style cheese steak
- *Garlic herb roasted pork
- Smart Cuisine: Southwestern grilled chicken
- Southwestern turkey wrap
- Assorted pizza slices
- *Marinated grilled chicken caesar salads

Carb restricted alternative

Wilson Hall Cafe menu

Chez Leon

Thursday, March 20
Dinner
- Seviche
- Paella
- Watercress, oranges & red onion salad
- Brazo de gitano

Wednesday, March 26
Dinner
- Roast pork calypso
- Fried plantain slices
- Black beans & rice
- Mango mousse w/coconut cookies

Chez Leon menu
Call x4598 to make your reservation.

Archives

All employees and their families are invited to the artist's reception this evening, March 20, from 5-7 p.m. The Fermilab singers will perform and light refreshments will be served. The exhibit will remain on display until May 14. For more information visit the Art Gallery Web site.

-- Rhianna Wisniewski

Announcement

Going phishing: DOE Red Teams testing cyber security

Groups of cyber security experts, called Red Teams, work directly for or under contract with DOE. They test whether federal cyber security standards are followed within DOE, including at the national labs. Evidence of Red Team phishing activity has been spotted at other laboratories as described below. Please stay alert when reading your e-mail.

The message below was sent to some employees at SLAC recently. It contains a similar, but invalid e-mail address, a good indicator of suspicious activity.

Based on information not contained in the message itself, it is highly likely this e-mail was sent by a Red Team within DOE. DON'T GO TO THE LINK IN THIS EXAMPLE, it is intended to compromise your computer and will record whether you fell for this scam. The periods were changed to carats in the link below to make it more difficult to accidentally follow. These test messages also record if you read your e-mail in html format. While not a violation of laboratory policy, Fermilab discourages reading e-mail in html format. Reading e-mail with html and image display disabled is safer. Computer users at Fermilab are our first line of defense against phishing exploits, so please be careful.

From: SLAC Computer Security [mailto: scs@slacstanford^com]
Sent: Thursday, March 13, 2008 10:08 AM
To: xxxxxxxxxxx
Subject: SLAC Malware Detection Tool

The Stanford Linear Accelerator Center in conjunction with the US Department of Energy Office of Science have developed this tool to detect Spyware, Malware, and Viruses that may be resident on your computer. This program works in conjunction with all current security programs that are resident on your system.

occur more frequently. To try and find out more about the single top production, CDF assembled three teams, each relying on a different, sophisticated analysis technique that uses features of the single top signal events to make them stand out from the backgrounds. Together, the teams created a super-analysis, based on the outcomes for each event in each of the three ingredient analyses to combine the results into a single number.

Top, from left: Tom Junk, Fermilab; Sarah Budd and Catalin Ciobanu, UIUC; Rainer Wallny, Bernd Stelzer and Peter Dong, UCLA; Florencia Canelli, Fermilab. Middle, from left: Bruno Casal and Barbara Alvarez, University of Cantabria; Wolfgang Wagner, Jan Lueck, Svenja Richter, Dominic Hirschbuehl, Manuel Renz and Thomas Muller, University of Karlsruhe. Bottom, from left: Jeannine Wagner-Kuhr, Thomas Peiffer, Irja Schall and Adonis Papaikonomou, Karlsruhe; Charles Plager, UCLA; Craig Group, Fermilab; Kevin Lannon, OSU. Background picture: "The single top high-rise." Artwork by Jan Lueck, photo by Reidar Hahn, Fermilab.

Result of the Week Archive

In the News

Important hearing on FY 2009 Office of Science request

From *FYI AIP*,
March 19, 2008

Energy Under Secretary for Science Raymond Orbach received a friendly reception when he testified before the House Energy and Water Development Appropriations Subcommittee on March 13. Despite this reception, it appears that the FY 2009 Office of Science request is facing significant challenges, not so much as a result of how high it is, but more because of how low, in Chairman Peter Visclosky's (D-IN) eyes, other DOE program requests are.

Visclosky's opening statement summarized the good new/bad news from this hearing. He told Orbach, "Your office is something of an anomaly in the Department of Energy: you do your best to deliver on promises made to this Committee and to follow the law of the land - a philosophy that other programs within DOE should adopt. Without your competent management, I would dismiss out of hand the

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

Spyware and other malicious content can be transferred to your system via the web or even email. This tool will detect and remove any spyware and malicious code detected on your system.

You can obtain the SLAC Malware Detection Tool (SLAC-MDT) from the following link: http://www^slacstanford^com/ SLAC-MDTSetup.exe

The setup file (SLAC-MDTSetup.exe) will install the detection tool on your system and create a start menu program called SLAC-MDT. You can launch the Malware Detection Tool from the start menu or from the desktop icon (if you chose to create one during the installation process). Once the detection tool is launched you will see various options regarding the types of content to scan for (Spyware, Malware, and Viruses). A thorough check of your entire computer takes around 3 minutes.

In the News

What is the matter with the universe?

**From *The Telegraph*,
March 19, 2008**

Scientists have come a step closer to answering a question that has bothered them for decades: what is the matter with the universe?

To be more specific, they want to know why there is enough matter to build planets, stars, galaxies and the 50 billion billion billion protons in each reader of this article.

The problem is that, by the standard picture of creation, we should not exist at all because equal quantities of matter and "antimatter" were created in the Big Bang some 13.7 billion years ago.

When matter and antimatter met, as anyone who watches Star Trek knows, they should have disappeared to form pure energy. This process of annihilation did occur, because today's universe is awash with this energy - called the cosmic microwave background radiation, a kind of echo of the Big Bang.

But why has all the antimatter disappeared and yet huge amounts of matter remain around us and within us?

19% increase for Science, given that the President's request savages the other energy and water programs under the Subcommittee's jurisdiction." Visclosky later said, "I am not a logician and therefore when looking toward fiscal year 2009 I fail to comprehend the President's logic in requesting a huge increase for Science while cutting funding for Energy Efficiency and Renewable Energy programs by $467 million. I fail to comprehend the reason behind requesting a huge increase in Science while decimating the DOE environmental clean-up and the water programs under our jurisdiction by more than $1 billion."

Read more

Accelerator Update

March 17-19
- Two stores provided 45 hours and 59 minutes of luminosity
- MI LCW put in recirculating mode
- MI-8 BPM problems fixed

Read the Current Accelerator Update
Read the Early Bird Report
View the Tevatron Luminosity Charts

Announcements

Have a safe day!

Monthly leave sheet
If you have not turned in your Monthly leave sheet, please do so immediately. They were due in Payroll on Wednesday.

IDES representative on site Friday
A representative from Illinois Department of Employment Security will be on site in the Wilson Hall One West conference room on Fridays through the end of March. Due to the increase in attendance, two larger group meetings will occur at 11 a.m. and 12 p.m. If you are beginning your furlough week, please fill out a benefit application on site. You may also apply for benefits online or at your local IDES office the week you are on furlough. Please contact Heather Sidman x3326 or Jeannelle Smith x4367 with questions.

SciTech summer camps
The SciTech Hands-on Museum offers Science Adventure Camps for children age 6-8 and age 9+. Week-long camps begin on June 23 and run from 9 a.m. to 3 p.m. Fees range from $200 to $225 per week. Before- and after-care is available for an extra fee. For

Read more

more information, visit the SciTech Web site.

Additional Activities