Fermilab Today

Friday, Dec. 12, 2008

Calendar

Friday, Dec. 12
2:30 p.m.
Special Particle Astrophysics Seminar (NOTE DATE) - Curia II
Speaker: Daniel Feldman, North Eastern University
Title: Connecting Dark Matter and the LHC in the Dual Probes of Physics Beyond the Standard Model
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
4 p.m.
Joint Experimental-Theoretical Physics Seminar - One West
Speaker: Shabnam Jabeen, Boston University
Title: The Top Quark as a Window to New Physics at D0

Monday, Dec. 15
2:30 p.m.
Particle Astrophysics Seminar - Curia II
Speaker: Adrienne Erickcek, California Institute of Technology
Title: Structure Beyond the Horizon: Inflationary Origins of the Cosmic Power Asymmetry
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
4 p.m.
All Experimenters' Meeting - Curia II
Special Topic: First Beam Down the Muon Test Area Line; CDMS Cryogenic System Upgrades

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

Weather

Sunny
15°/15°

Extended Forecast
Weather at Fermilab

Current Security Status

Secon Level 3

From iSGTW

How to run a million jobs

At SC08, several experts organized an informal session to share information on up-and-coming solutions for expressing, managing, and executing “megajobs.” They also discussed ways of repackaging work to avoid megajobs altogether.

Here iSGTW shares the latest ideas and developments about megajobs with its readers, and plans to follow up with articles on various mentioned technologies and trends in the coming months.

Biting off a megajob—it's a lot to chew

As large systems surpass 200,000 processors, more scientists are running “megajobs”, thousands to millions of identical or very similar, but independent, jobs executed on separate processors. From biology, physics, chemistry and mathematics to genetics, mechanical engineering, economics and computational finance, researchers want an easy way to specify and manage many jobs, arrange inputs, and aggregate outputs. They want to readily identify successful and failed jobs, repair failures, and get on with the business of research. System administrators need effective ways to process large numbers of jobs for multiple users.

Read more

Special Announcement

Sudanese Lost Boys visit Fermilab

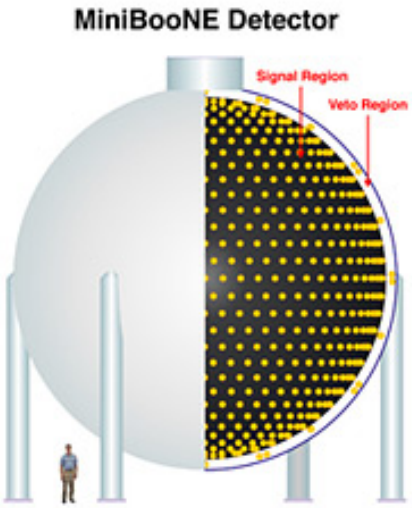
A group of Lost Boys, Sudanese refugees, will visit Fermilab for a lunchtime presentation at 12:15 p.m. on Dec. 17.

Decades of war and genocide in Sudan have caused about 200,000 deaths, left 2.5 million people homeless and sent countless people fleeing to the United States.

Several hundred of those refugees have made their way

Special Result of the Week

MiniBooNE reports first antineutrino results



The MiniBooNE experiment uses 1,280 photomultiplier tubes to detect neutrinos interacting in a tank of mineral oil.

Despite enormous progress in the field of neutrino physics over the last two decades, numerous mysteries and basic questions about neutrino oscillations remain. This week, the MiniBooNE collaboration released a preliminary result that sheds more light on neutrino oscillations.

The MiniBooNE experiment explores the question whether muon neutrinos morph into electron neutrinos while traveling relatively short distances. In the 1990s, the Liquid Scintillator Neutrino Detector at Los Alamos National Laboratory seemed to have observed such a signal for *antineutrinos*. Based on results obtained with *neutrinos*, the MiniBooNE collaboration announced in April 2007 that its experiment could not confirm the LSND result. Instead, at neutrino energies lower than what would be expected under a simple two-neutrino mixing interpretation of LSND, MiniBooNE found a 3.7-sigma excess of electron neutrinos emerging from the primary beam of muon neutrinos.

This puzzling observation opened up the door for new questions. Is the low-energy excess observed by MiniBooNE in neutrino mode due to some misestimated background? Is it due to some new physics? Can it be related to the LSND anomaly observed for antineutrinos?

While theorists have been pondering possibilities, the MiniBooNE experiment has been busy collecting new data with a predominantly antineutrino beam. In this mode, data are acquired five times slower than in the neutrino mode because of a reduction in the overall

Wilson Hall Cafe

Friday, Dec. 12
- Chunky vegetable soup w/orzo
- Buffalo chicken wings
- Cajun breaded catfish
- Teriyaki pork stir fry
- Honey mustard ham & Swiss panini
- Assorted sliced pizza
- *Carved turkey

Wilson Hall Cafe Menu

Chez Leon

Wednesdsay, Dec. 17 Lunch
- Tortellini with shrimp, red peppers, green onions and pine nuts
- Spinach & pomegranate salad
- Peppermint cheesecake

Thursday, Dec. 18 Dinner
- Spinach & strawberry salad
- Lobster tail
- Spaghetti squash w/ green onions
- Green bean almandine
- Crème de menthe mousse w/ Christmas cookies

Chez Leon Menu

Call x4598 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

to Chicago and DuPage County.

Among them are children dubbed “Lost Boys,” who traveled thousands of miles alone through jungles, past militants and wild animals to safety.

A group of Lost Boys will visit Fermilab for a lunchtime presentation and discussion from 12:15 to 1:15 p.m. Dec. 17 in One West. The group will talk about their experiences in Sudan and the United States and a Chicago-area campaign to create a community center for Sudanese refugees to help them build new lives and maintain their heritage.

The Fermilab Planning Group for Multicultural Events organized the visit as part of Universal Human Rights Month.

In the News

Mich. State Univ. awarded nuclear physics facility

From ***Associated Press***, Dec. 11, 2008

The U.S. Department of Energy on Thursday chose Michigan State University for a $550 million cutting-edge nuclear physics research facility that could attract top scientists from around the world and boost the state's economy.

The facility, which would be built within 10 years, could spark scientific breakthroughs affecting medicine, national defense research and the environment.

Sen. Debbie Stabenow, D-Mich., said the announcement signals a commitment from the U.S. government to the science involved in the new technology. Funding for construction of the new facility still must be secured through Congress.

"This is wonderful news," Stabenow said. "This could not come at a more critical time for us as we're struggling with our economy."

Michigan State had been competing with Argonne National Laboratory in Illinois for the facility for rare isotope beams. Thursday's announcement culminates a process that started in 1996 when a long-range plan first recommended the development of a next-generation nuclear structure and astrophysics facility as a high priority.

Read more

antineutrino event rate.

Read more

Announcements

Have a safe day!

Science Chicago hosts Mythbusters

IRS Final 403(b) Regulations

"Atom Smashers" DVD discount

FileMaker Pro 8.0 - Dec. 10

NALWO - Christkindlmarket Chicago, Dec. 13

Barn Dance Dec. 14

Fermilab Blood Drive Dec. 16, 17

The University of Chicago Tuition Remission Program deadline Dec. 17

Weekly Time Sheets are due Dec. 18

International Folk Dancing holiday party Dec. 18

Monthly Leave Sheets due Dec. 19

NALWO - A Russian style New Year Dec. 20

Shop early - Lederman Science Center store open until Dec. 20

Barn Dance Dec. 21

Weekly Time Sheets due Dec. 22

SciTech winter camps, Dec. 22-23 and 29-30

Find carpool partners with PACE

Python Programming - Jan. 6 - 8

Intermediate / Advanced Python Programming - Jan. 27 - 29

Additional activities

Submit an announcement

Classifieds

Find new classified ads on *Fermilab Today*.