Fermilab Today

Friday, April 9, 2010

Calendar

Have a safe day!

Friday, April 9
8 a.m. - 5 p.m.
International Design Study for the Neutrino Factory meeting - Curia II
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
Joint Experimental-Theoretical Physics Seminar
Speaker: Ryan Patterson, California Institute of Technology
Title: New Results for Muon Neutrino to Electron Neutrino Oscillations in the MINOS Experiment

Monday, April 12
THERE WILL BE NO PARTICLE ASTROPHYSICS SEMINAR TODAY
3:30 p.m.
DIRECTOR'S COFFEE BREAK 2nd Flr X-Over
4 p.m.
All Experimenters' Meeting - Curia II
Special Topic: T-932: Prototype CMS Pixel Luminosity Telescope (PLT) at MTest

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

Upcoming conferences

Campaigns

Take Five

Tune IT Up

H1N1 Flu

Special Announcement

MINOS to present results today at 4 p.m. in One West

MINOS collaboration members will present results concerning muon neutrino to electron neutrino oscillations at a series of talks taking place today at Fermilab, SLAC National Accelerator Laboratory and Brookhaven National Accelerator Laboratory, and early next week at CERN.

The talks are based on analysis of a dataset that more than doubles the data published in earlier MINOS studies. MINOS collaborator Ryan Patterson will present the new results at 4 p.m. today, following Wine and Cheese, in One West.

Photo of the Day

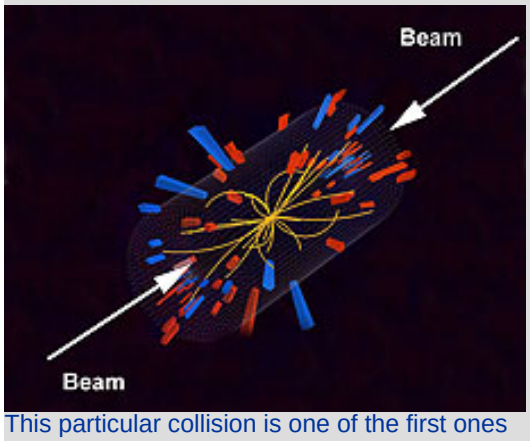
Members of Chicago's Swiss community visit Fermilab

Members of the Swiss community of Chicago visited Fermilab on March 25 as part of "Big Bang at CERN in Switzerland," an event hosted by Fermilab and the Consul General of Switzerland. Giambattista Mondada, Consul General of Switzerland, pictured above wearing a purple tie, and community members ate Swiss food and American apple pie, toured the laboratory and heard lectures from Fermilab scientists and experiment collaborators.

Feature

CMS Result of the Month

Result of the quarter century



This particular collision is one of the first ones observed at the LHC's record-setting operating energy of 7 trillion electron volts of energy, 3.5 times higher than the Tevatron.

Fermilab Today readers are familiar with both the Result of the Week and the Result of the Month columns. However this column is really neither. In it, I discuss an achievement that occurs much more rarely. Indeed, today's column could be well described as the result of a quarter century.

On March 30, at 6:06 a.m. (Chicago time), the Large Hadron Collider delivered colliding beams to the four experiments around its ring. As members of the international media watched, the CMS detector saw intentional collisions between beams of protons at the whopping energy of 7 TeV. These collisions are 3.5 times more energetic than those that are delivered by the Fermilab Tevatron. While the world in December saw a handful of collisions just a bit above the Tevatron's ability, March 30 marked the official start of the CERN research program at the LHC. Although Fermilab has occupied the Energy Frontier since 1985, they will share this frontier with CERN for the next few years.

While it might seem odd to live in a world where the Tevatron isn't the energy king, Fermilab scientists continue as leaders at the knowledge frontier. The Tevatron continues to deliver record-setting luminosity, which adds to a huge data set that will not be matched for many years. Ongoing studies at the Cosmic Frontier will explore mysterious dark matter and energy sectors that comprise 95 percent of the energy in the universe. Work on the

For information about H1N1, visit Fermilab's flu information site.

Weather

Sunny
58°/38°

Extended Forecast
Weather at Fermilab

Current Security Status

Secon Level 3

Wilson Hall Cafe

Friday, April 9
- Chorizo burrito
- 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

Wednesday, April 14
Lunch
VEGETARIAN MEAL
- Lasagna rolls w/red pepper sauce
- Sugar snap peas
- Cinnamon apple cake

Thursday, April 15
Dinner
- Spinach & strawberry salad
- Flank steak w/balsamic glaze
- Walnut crusted potato & bleu cheese cakes
- Steamed broccoli
- Chocolate mousse pie

Chez Leon menu
Call x3524 to make your reservation.

Archives

Fermilab announces arrival of new maternity closet

Fermilab's new maternity closet is now open on the 15th floor.

There is little more frustrating than spending a lot of money on an article of clothing, such as an evening gown, and then never wearing it again. Maternity clothes fall into that category, and now Fermilab has a program to help ease that frustration, not to mention save some cash for mothers-to-be.

The Mothers at Work program is pleased to announce the creation of a “maternity closet” for employees, users and spouses. The maternity closet contains gently used clothing for expectant mothers to use and allows those women to donate clothes when the clothes are no longer needed.

“The addition of the maternity closet allows women to not worry about paying a lot of money for something they wear a brief amount of time,” said Amber Johnson, an engineering physicist in Fermilab’s Accelerator Division.

In addition, the Fermilab Mothers at Work program offers a Mothers’ Room for women who want to continue nursing. The Employee Assistance Program also offers a new baby kit and child care provider research.

Heather Sidman, a Fermilab workforce relations specialist, is in charge of the Mothers at Work group. She created the maternity closet after researching benefits at other top companies. Sidman believes these programs help to make Fermilab a family-friendly workplace.

"Science careers can be very time-consuming, with lots of long hours for many years. Women often struggle to decide whether to postpone motherhood or risk derailing their careers. The Mothers at Work group makes the decision much easier,” said Maggie Stauffer, a technician in the Accelerator Division.

Intensity Frontier will deliver unprecedentedly bright neutrino beams and lead the way into next-generation accelerators. And the Fermilab scientific staff continues to explore the Energy Frontier, both at home and by playing a major role in research done at the LHC.

Approximately 50 members of Fermilab’s scientific staff do some or all of their research on CMS data. In addition, Fermilab also hosts both the ROC (CMS Remote Operations Center) and the LPC (LHC Physics Center). The ROC allows people to come to Fermilab and take shifts during which they can monitor in real time the integrity of data taken by the CMS detector. And the LPC provides a focus for U.S. physicists to do analyses using CMS data. About 50 additional physicists from U.S. universities are stationed here at Fermilab, providing a critical mass of skills and expertise to efficiently mine the dataset for interesting measurements. Fermilab is also the host institution for the U.S. CMS Operations Program consisting of 46 universities and two national laboratories.

Fermilab's scientific staff congratulates their CERN counterparts and look forward to working alongside them on the Energy Frontier for many years to come.

- Don Lincoln


The detector is the source of the data we will be analyzing for the next decade or more.

Fermilab Today

Result of the Week

Safety Tip of the Week

User University Profiles

ILC NewsLine

Info

Fermilab Today
is online at:
www.fnal.gov/today/

Send comments and suggestions to:
today@fnal.gov

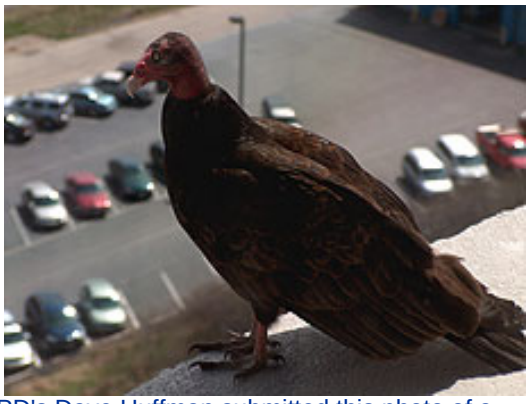
Visit the Fermilab
home page

The maternity closet is located on the 15th floor of Wilson Hall and is now open. Those interested in using or donating clothes should make an appointment with Heather Sidman at x3326 or Jeannelle Smith at x4367. All clothing should be gently used and in fashion.

-- Tonisha Taylor

Photo of the Day

Just stopping by



PPD's Dave Huffman submitted this photo of a turkey vulture that landed outside of his office window on Wilson Hall's 14th floor.

In the News

Our universe at home within a larger universe? So suggests physicist's wormhole research

From ***Science Daily***, April 7, 2010

Could our universe be located within the interior of a wormhole which itself is part of a black hole that lies within a much larger universe?

Such a scenario in which the universe is born from inside a wormhole (also called an Einstein-Rosen Bridge) is suggested in a paper from Indiana University theoretical physicist Nikodem Poplawski in Physics Letters B. The final version of the paper was available online March 29 and will be published in the journal edition April 12.

Poplawski takes advantage of the Euclidean-based coordinate system called isotropic coordinates to describe the gravitational field of a black hole and to model the radial geodesic motion of a massive particle into a black hole.

In studying the radial motion through the event horizon (a black hole's boundary) of two different types of black holes -- Schwarzschild and Einstein-Rosen, both of which are

These physicists are the leaders of Fermilab-based groups playing a large role on CMS. Lothar Bauerdick heads the CMS center, which includes physicists from all Fermilab divisions. Ian Shipsey and Rick Cavanaugh head the LHC Physics Center (LPC). Kaori Maeshima is in charge of the Remote Operations Center (ROC). Joel Butler is the U.S. CMS Operations Program manager. Finally, Dan Green currently chairs the CMS Collaboration Board, and he led the U.S. CMS Construction Project until 2006 and the LPC until 2010. Their respective operations represent a huge contribution to the international CMS collaboration.

Announcements

Latest Announcements

Fermilab Functions class - June 2, 8, & 10

Performance Review class - May 26

Interaction Management class - May 5, 12, & 19

Behavioral Interviewing class - April 28

Job descriptions and employment class - April 21

Sam's Club Fermilab employee offer - join through April 12

Undergraduate summer interns

Ask HR - 15th floor comes to DZero Assembly Building conference room on Wednesday, April 14

Ask HR - 15th floor comes to Day Care on Monday, April 12

Free staff appreciation massage April 13 and 16

Retiree Club

Celebrate National Humor Month

Tartan Day party at Scottish dancing

Cross-step waltz workshop - April 11, Kuhn Village Barn

The Recipe Exchange potluck lunch - April 16

AutoCAD Intermediate classes - June

mathematically legitimate solutions of general relativity -- Poplawski admits that only experiment or observation can reveal the motion of a particle falling into an actual black hole. But he also notes that since observers can only see the outside of the black hole, the interior cannot be observed unless an observer enters or resides within.

"This condition would be satisfied if our universe were the interior of a black hole existing in a bigger universe," he said. "Because Einstein's general theory of relativity does not choose a time orientation, if a black hole can form from the gravitational collapse of matter through an event horizon in the future then the reverse process is also possible. Such a process would describe an exploding white hole: matter emerging from an event horizon in the past, like the expanding universe."

Read more

22 -24

AutoCAD Fundamentals class - June 6 - 8

FORE! The 2010 golf season is about to hit you

SciTech summer camps start June 14

Butts & Guts class - sign up now

Blackberry Oaks Monday night golf league

Employee discount at Batavia Rosati's

Country House discount for employees

Harlem Globetrotters special ticket price - April 15

Qi Gong, Mindfulness and Tai Chi Easy for Stress Reduction

Argentine Tango through April 28 - student discount available

Calling all softball players

Fermilab Management Practices Seminar classes begin in April

NALWO bus trip to The Museum of Science and Industry - April 24

ANSYS Mechanical Application classes in May

Intermediate /Advanced Python Programming - May 19-21

Additional activities

Submit an announcement

Classifieds
Find new classified ads on *Fermilab Today*.