Fermilab Today

Monday, November 12, 2007

Calendar

Monday, Nov. 12
9 a.m. - 8 p.m.
Project X Accelerator Physics and Technology Workshop - Ramsey Auditorium
12 p.m.
Wellness Works Brown Bag Seminar - Curia II
Speaker: R. Taylor (Author)
Title: Alzheimer's from the Inside Out
2:30 p.m.
Particle Astrophysics Seminar - Curia II
Speaker: D. Johnston, NASA JPL
Title: Constraining Cosmology with Weak Lensing of Galaxy Clusters: The SDSS to DES and Beyond
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
4 p.m.
All Experimenters' Meeting Special Topic: CMS Installation and Commissioning - Curia II

Tuesday, Nov. 13
9 a.m. - 4 p.m.
Project X Accelerator Physics and Technology Workshop - Ramsey Auditorium
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

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

Weather

Chance of showers
63°/44°

Extended Forecast
Weather at Fermilab

Feature

GCC extinguishes threat of electronic library fire

Gene Oleynik (right) surveys new fire suppression equipment as Phoenix Fire worker John Sullivan continues installation.

Imagine the devastation a fire would wreak upon a library filled with thousands of volumes. It is easy to picture scorched pages and burnt binding, but even a paperless library could go up in smoke. Gene Oleynik, the head of data storage and caching section at the Grid Computing Center, said that the laboratory takes precautions against such an incident.

In late October, a crew from Phoenix Fire, a company based in Frankfort, IL, installed fire suppression equipment for a new library that will store data from the LHC and Fermilab experiments.

This electronic data storage unit will be the second housed in the GCC tape library room. The new unit, a big, black enclosed box, is empty now, but soon robot-librarians will whisk down the aisles to retrieve data tapes. The current GCC library, which has been running for the past year, receives about 3,000 tape requests per day.

In the unlikely event that a fire does start inside the library, the library, like its predecessors, is equipped with an early warning air sampling device that monitors the air inside for smoke and calls the Fire Department. In addition, smoke alarms sit at both ends of the library. If both alarms go off, two man-sized canisters filled with flame suppressing gas will release their contents into pipes that connect inside the unit. A fire would

Safety Tip of the Week

Stuck wheels

Big wheels with hard rubber tires are a good choice for a cart carrying oxy-acetylene cylinders. This photo was taken at the north end of the Linac Gallery.

The wheel has long been known as one of man's greatest inventions. As good as it is, however, even the simplest machine can fail, causing people to get hurt.

During the past six weeks, Fermilab has had four occupational injuries caused by wheels getting stuck during the manual movement of equipment. Two occurred upon elevator entry, one in the low spot at the hinged area of an open tailgate, and one was due to a wayward-facing caster. In every case, an unexpected stop either caused or contributed to the injury.

Here are some factors to consider when using wheeled devices for manual material handling.

Plan the move - Examine the size and weight of the item to be moved. Can the path of travel and the wheeled device safely accommodate the load? Is the load balanced and secure? Can you complete the move without undue effort or should you get help?

Wheel design - Usually, larger diameter wheels are best. Rubber tires are less likely to slip or damage floor surfaces than are those made of metal or hard plastic. Soft pneumatic tires travel more easily across bumps and depressions and are less likely to hurt toes or fingers that might get in the way.

Wheel function - Are the wheels still round? Do they turn freely? If you need brakes, do they work? If equipped with casters, do they freely change direction?

Safety Tip of the Week Archive

iSGTW Press Release

Current Security Status

Secon Level 3

Wilson Hall Cafe

Monday, Nov. 12
- Not available

Wilson Hall Cafe Menu

Chez Leon

Wednesday, Nov. 14
Lunch
- Pork satay w/peanut sauce
- Sautéed asian vegetables
- Steamed jasmine rice
- Banana spring rolls

Thursday, Nov. 15
Dinner
- Curried butternut soup
- Spiced rubbed duck w/port wine sauce
- Corn risotto w/tomato and basil
- Rum raisin soufflé

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

be suppressed almost instantly, according to Oleynik.

Oleynik said it took about a week for the crew to install the equipment but it is worth it, considering what is at stake. The current library stores up to four petabytes (four million billion bytes) of data, mostly from CMS and CDF. In addition, GCC and FCC libraries store data for DZero, MiniBoone, SDSS, DES, KTeV, SELEX and other projects. All of the experimenters involved in these projects rely upon the libraries for data storage and retrieval. "All of the projects depend upon these facilities," Oleynik said. "We take great care to ensure that the physics data we hold at Fermilab is well protected. GCC systems are protected by the laboratory's fire department systems specialized for data centers, and by this system installed with the tape library."

-- Haley Bridger

In the News

Energetic cosmic rays may start from black holes

From *The New York Times*, Nov. 9, 2007

They are the zestiest bits of matter in the universe. They can zing through space for millions of years at essentially the speed of light and with 100 million times the energy produced by the biggest particle accelerators on the earth, before crashing occasionally into Earth's atmosphere and dying in a spray of microscopic fluff.

Since these ultrahigh-energy cosmic rays, as they are known, were first glimpsed in 1963, physicists and astronomers have scratched their heads wondering where they came from and what gargantuan process could produce such energies — wondering, even, if they were real.

Read more

In the News

International Science Grid This Week celebrates one year

On 14 November 2007 International Science Grid This Week will celebrate its one-year anniversary.

Now with more than 3400 subscribers, iSGTW attracted over 70,000 visitors during October, an almost six-fold increase over the last six months.

A collaboration between Open Science Grid in the U.S. and Enabling Grids for E-sciencE in Europe, iSGTW promotes the success of grid computing as a tool for scientists and researchers.

Read more

Accelerator Update

Nov. 7 - 9
- B0 magnet moves completed
- New MTest experiment gets beam
- TeV begins tuning accelerator
- Operations manages many LCW and vacuum valve closures

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

Announcements

Have a safe day!

Alzheimer's Brown Bag Seminar today
Richard Taylor, PhD, will present a Brown Bag Seminar today from noon to 1 p.m. in Curia II. Taylor is returning by popular request. He is the author of "Alzheimer's from the Inside Out." Taylor has been diagnosed with dementia--probably of the Alzheimer's type. He will give an honest perspective of the disease and its challenges.

Benefit enrollment
Your opportunity to review and change your benefits for the 2008 plan year will be from Tuesday, Nov. 13 through Wednesday, Nov. 28. You will find enrollment materials on the Benefits Office Web site. Representatives from Blue Cross and CIGNA will be available on Wednesday, Nov. 14, from 8 a.m. to noon and Tuesday, Nov. 20, from 1 to 5 p.m. They will be located in the Aquarium Conference Room on the 15th floor of Wilson Hall.

Kyuki-Do class begins Nov. 12
Kyuki-Do is a combination of Taekwon-Do,

Black holes belch universe's most energetic particles

From *National Geographic News*, Nov. 8, 2007

The most energetic particles in the universe shoot from supermassive black holes at the centers of galaxies, a new study suggests.

Particles known as cosmic rays are constantly bombarding objects in space. The sun bathes Earth in low-energy cosmic rays, astronomers have found, and exploding stars emit medium-energy particles.

Read more

Judo, and Hapki-Do. Classes are held for six weeks on Monday and Wednesday from 5 to 6 p.m. at the Recreation Facility in the Village. You need to register through the Recreation Office and also be a member of the Recreation Facility. The class is taught by Bruce Worthel. It focuses on teaching a practical self-defense that can be used by anyone.