Fermilab Today

Tuesday, Nov. 18, 2008

Calendar

Tuesday, Nov. 18
12 p.m.
Special Accelerator Physics and Technology Seminar - One West
Speaker: Thomas Hott (DESY)
XFEL and Collaboration with ILC SCRF
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
4 p.m.
Accelerator Physics and Technology Seminar - One West
Speaker: James Volk, Fermilab
Title: Permanent Magnet Work at Fermilab 1995 to Present

Wednesday, Nov. 19
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
4 p.m.
Fermilab Colloquium - One West
Speaker: David Hitlin, California Institute of Technology
Title: Searching for New Physics at SuperB – The Super Flavor Factory

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

Weather

Partly cloudy
36°/22°

Extended Forecast
Weather at Fermilab

Current Security Status

Secon Level 3

Wilson Hall Cafe

Feature

Patty McBride elected IUPAP commission chair

Patty McBride

A committee of the International Union of Pure and Applied Physics has elected Patty McBride, Computing Division's deputy head, as its chair.

Members who attended IUPAP's recent General Assembly meeting, held in Japan last month, also elected her as one of the five chairs who serve as vice president of the IUPAP executive council.

McBride will now head the organization's Commission on Particles and Fields, which promotes the exchange of information and views among the members of the international scientific community.

McBride has previously served as vice chair of the commission. In that position, McBride worked closely with the previous chair on all aspects of the commission business.

"That role was appreciated by all commission members, and she was the natural choice to succeed Gregor Herten as chair," wrote commission member Bill Carithers of Lawrence Berkeley Laboratory in an e-mail.

"Of course," he wrote, "I would say that Patty's primary qualification is her stature as an internationally eminent scientist." McBride has worked on global projects from the Superconducting Super Collider in Texas to her current role on CMS at the LHC. As high-energy physics becomes increasingly international, Carithers wrote, experience with global cooperation becomes crucial for commission members.

McBride said, "These international meetings put things in a broader context. The commission is a way to look outward."

Three officers and 10 members from 12 countries compose the group.

McBride and the commission will help prepare and supervise two major international

Director's Corner

Pierre Auger Inauguration

From left: Jim Cronin, Pier Oddone and Alan Watson

Last Friday, the official ceremony to inaugurate the Pierre Auger Observatory took place in Malargüe, Argentina. The Argentine vice president, the governor of the province of Mendoza and many dignitaries from the countries contributing to this great observatory were present. A symposium on the construction of the observatory and the physics results and future prospects preceded the ceremony. The following day, a caravan of mini-buses left from Malargüe to tour the observatory. It was an awesome experience.

The audacity of the folks who conceived the observatory to cover 3,000 square kilometers of the Argentine pampa with detectors is evident in the amazingly vast landscape of the Pampa Amarilla, the basin where 1,600 Cerenkov counters are placed on a regular grid against the backdrop of the Andes. These counters detect the extensive cosmic-ray showers that originate with primary particles that have energies up to a hundred million times the energy of the Tevatron beam and strike a nucleus high in the atmosphere.

In addition to the Cerenkov counters that are arrayed in the basin, 24 fluorescent telescopes record the light produced by these massive showers in the atmosphere from promontories in the periphery of the array. Even before its completion and inauguration the Pierre Auger Observatory already produced important and surprising results.

Professor Jim Cronin of the University of Chicago and Professor Alan Watson of Leeds University were the pioneers of this experiment, starting with a challenge from Cronin in 1991 to think big: a 5,000 square kilometer array. In 1995, a six-month-long

Tuesday, Nov. 18
- Creamy turkey vegetable
- Chili dog
- Shepard's pie
- Chicken cacciatore
- Italian panini w/provolone
- Assorted sliced pizza
- Super burrito

Wilson Hall Cafe Menu

Chez Leon

Wednesdsay, Nov. 19
Lunch
- Asian grilled flank steak with rice noodles and vegetables
- Coconut caramel cake

Thursday, Nov. 20
Dinner
- Steamed mussels with white wine & thyme
- Grilled marinated lamb chops
- Mushroom risotto
- Sautéed spinach
- Mocha soufflé

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

conferences in particle physics: the International Conference in High Energy Physics and the International Symposium on Lepton-Photon Interactions at High Energy. As commission chair, McBride will serve as an ex-officio member of the International Committee on Future Accelerators. She and the commission also will award two biannual Young Scientist prizes.

--Kathryn Grim

In the News

Repairs to Swiss particle collider will cost $25M

From ***Associated Press***, Nov. 17, 2008

The scientific organization CERN says repairs caused by an electrical fault in the world's largest atom smasher will cost 25-35 million Swiss francs ($21-29 million).

Spokesman James Gillies says the work on the Large Hadron Collider will be covered by the budget of the European Organization for Nuclear Research.

Gillies says 15 million francs ($13 million) is the price tag for repairing the machine and preventing a recurrence. Confirming a report in the Swiss newspaper Sonntag, Gillies said Monday the remaining money will be used to replace the spare parts.

An electrical arc on Sept. 19 shut down the particle collider only nine days after the $10 billion machine started up with great fanfare on the Swiss-French border.

See article

In the News

Mining for dark matter, some go wimp-hunting

From ***Wall Street Journal*** , Nov. 11, 2008

The exotic particles would explain a lot about the universe, and that promise has scientists going underground

You might think an astrophysicist would spend much of his time with his head in the stars. Instead, Sean Paling often squeezes into a cage with a bunch of burly miners and travels for six minutes in darkness to the bottom of Britain's deepest working mine.

At a lab here, 3,300 feet underground, Dr.

workshop at Fermilab led to the design of the observatory.

Since selecting the site in Argentina the collaboration has grown to be very broad, with 17 countries, 71 institutions and more than 400 scientists collaborating in the enterprise. No single country is dominant, but Fermilab's role in the engineering and management of the project was much complimented at the inauguration, especially the leadership of Paul Mantsch as project manager and the contributions of the very strong Fermilab team on the project.

There are many notable qualities of the Pierre Auger collaboration and its impact on the community of Malargüe, a town where physicists are rock stars. Politicians take pride in the observatory and have used it to promote Malargüe as a destination for science tourism. A modern conference center, a planetarium and improved schools are all a result of the adoption of physics by political representatives and the local population. The then-mayor of Malargüe, who supported Pierre Auger, is now the governor of Mendoza province after being a senator for Mendoza in Buenos Aires – a meteoric career propelled by cosmic air showers.

As we left Malargüe Sunday morning to return to the U.S., the physicists and staff of Pierre Auger were getting ready to take part in the annual parade celebrating the founding of Malargüe as an independent town. Traditionally, the loudest cheers along the parade are for the Pierre Auger team.

Accelerator Update

Nov. 14-17
- Four stores provided 53.55 hours of luminosity
- Booster Chopper repaired
- NuMI horn off
- LRF5 problems

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

Announcements

Paling is searching for one of the most elusive objects in the universe: a wimp, or weakly interacting massive particle. Wimps are leading candidates for dark matter, which is believed to account for up to 95% of the mass of the universe. Something that big would be easy to spot except for the fact that dark matter is invisible. That doesn't stop the elusive mass from making its presence felt by the immense gravitational tug it exerts on stars, galaxies and other cosmic bodies.

Read more

Have a safe day!

Annual Enrollment Nov. 17 - Dec. 10

Scottish country dancing Nov. 18

Weekly Time Sheets Nov. 18

Fermi singers perform Thursday, Nov. 20

Monthly Leave Sheets Nov. 18

International Folk Dancing, Nov. 20

Fermilab Arts Series Presents Klezmatics on Saturday, Nov. 22, 8 p. m.

English Country Dancing, Nov. 23

Director's volunteer award Nov. 25

Exciting Explorations! child care program offered Nov. 24-26

Fidelity Representative at Fermilab Dec. 3

Education Office Holiday Sale, Dec. 3 & 4

Submit an announcement

Additional Activities