

Calendar

Tuesday, Jan. 15

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

[Accelerator Physics and Technology Seminar](#) - One

West

Speaker: G. Stancari, INFN Ferrara

Title: Production, Transport and Laser Trapping of Radioactive Francium Beams for the Study of Fundamental Interactions

Wednesday, Jan. 16

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

[Fermilab Colloquium](#) - One

West

Speaker: R. Roser, Fermilab

Title: The Tevatron and the CDF Experiment – A Year in Review

[Click here for NALCAL](#), a weekly calendar with links to additional information.

Weather



Partly sunny 28°/20°

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

[Secon Level 3](#)

Wilson Hall Cafe

Milestone

Dan Green elected CMS Collaboration Board Chair

Last month, the CMS experiment elected Fermilab's Dan Green as their next CMS collaboration board chair. As chair, Green will play a vital role in maintaining strong internal communication within the international project and serve as a conduit between the spokesperson and the rest of the collaboration.



Dan Green

"The role of the chair is to strive to both energize and knit together all members of the collaboration," said Green. "I am honored and humbled to have been entrusted with this position."

CMS, one of the largest scientific instruments ever built, is essentially a 100-megapixel camera that will take 40 million pictures of particle interactions a second. With 2,300 scientists from 37 countries, it is also one of the world's largest collaborations. "When you have a big collaboration, communication is usually a problem," Green said. "We want to make sure that everyone stays informed and that we establish consensus."

Increasing the involvement of graduate students and postdocs is extremely important, especially as CMS begins to transition from construction to taking data, Green explained. The collaboration board will help determine how to make the data most accessible to experimenters. Delivering the data quickly and accurately is equally important. "This is truly going to be a phase change, which is great because it means that we will be getting data soon," Green said. "I expect the collaboration board will become more interesting as time goes by."

Green is currently one of the coordinators for the LHC Physics Center at Fermilab and has been a member of CMS since 1994. His term as CMS chair officially begins in January 2009. He will work closely with the current chair, Lorenzo Foa of the University of Pisa,

Director's Corner

Awake!

During the last two weeks the Tevatron has been back to record-breaking territory after a slow awakening at the beginning of this run. Many small, unrelated breakdowns plagued the first two months of running. The Cockcroft-Walton, Linac, Booster, Main Injector, Accumulator, Debuncher, Recycler, Pelletron (electron cooling) and the Tevatron proper constitute the nine accelerators in this formidable complex that must all work before we get an ounce of luminosity - well, ounces are not the measure, but you get the idea. Combined, these accelerators contain some two hundred thousand controllable elements. It is no surprise that it takes much effort to awaken the machine and bring it into smooth operation after an extended shutdown.

The accelerator team has worked with great dedication to bring all the accelerators up and keep them running. Many worked over the holidays to repair components and get the machine ready for the turn of the New Year. Despite the distraction and tension associated with this year's budget problems caused by the omnibus bill, the team has delivered magnificently.

The coming months will be even more difficult and demanding, especially when we start a "rolling furlough," which will effectively remove about 10 percent of the effort now dedicated to running the machine. The Tevatron has priority for us this year. We will ensure that some of the folks who stopped working on the ILC or SCRF, as well as others across the laboratory, join the accelerator team to make sure we keep operations running as smoothly as possible. In the meantime, the data-taking and analysis continue with increasing sensitivity. We hope for a great payoff.



Pier Oddone

Accelerator Update

Tuesday, Jan. 15

- Creamy turkey vegetable
- Chicken gyros
- *Salisbury steaks w/ mushroom au jus
- Chicken cacciatore
- Italian panini w/provolone
- Assorted slice pizza
- Super burrito

*Carb Restricted Alternative

[Wilson Hall Cafe Menu](#)

Chez Leon**Wednesday, Jan. 16****Lunch**

- Catfish fillet Veracruz
- Green rice
- Corn and red pepper

Thursday, Jan. 17**Dinner**

- Closed

[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

during the next year.

-- *Elizabeth Clements*

Feature**Friday lecture prepares for the the particle physics revolution**

The CMS detector, part of the LHC at CERN, could help to uncover answers to the universe's most fundamental questions. Fermilab Theorist Chris Quigg will address those questions and the possibilities from physics at the LHC in his talk Friday.

Revolutions in Particle Physics," Quigg will explore what we expect to learn from discoveries from the LHC and what strides we hope to make in understanding some of nature's most fundamental questions.

Among potential advances Quigg will address are the factors that could distinguish electromagnetism from weak interactions. He'll also address the possibility of discovering the Higgs boson and other phenomena including the search for particles that may clarify why gravity is so much weaker than other fundamental forces.

A member of Fermilab staff since 1974, Quigg is internationally known for his studies of heavy quarks and cosmic neutrinos, and for highlighting the importance of the Fermi scale. He served as head of Fermilab's Theoretical Physics Department for 10 years and taught at universities around the world. He received the Alexander von Humboldt Research Prize for 2008.

Chris Quigg's "Coming Revolutions" and the Large Hadron Collider are featured in the February 2008 issue of *Scientific American*. He is the author of a celebrated textbook on particle physics, and edited the *Annual Review of Nuclear and Particle Science* from 1994 to 2004.

["The Coming Revolutions in Particle Physics"](#)

Later this year, the LHC at CERN will begin operating. The discoveries made and the puzzles

encountered by this great machine will change the face of particle physics.

On Friday, Jan. 18, at 8 p.m. Fermilab theorist Chris Quigg will address the field's exciting potential for change. In his talk, titled "The Coming

Jan. 9-14

- Three stores provided 38 hours and 48 minutes of luminosity
- MI vacuum leak found and temporarily repaired
- MI implements 11-batch slipstack running mode
- Three stores provided 57 hours and 9 minutes of luminosity
- CDF solenoid had cryo system problem

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

Announcements**Project X physics workshop Jan. 25-26**

Fermilab will host a second users' workshop Jan. 25-26 to discuss the physics of Project X. The workshop will focus on the details of the experiments that might be proposed to take advantage of a high-intensity proton source, their physics impact and the development of the overall experimental strategy. Information about the workshop, working groups and ongoing efforts is available [online](#).

New location for International Services

The Visa Office and Assignment Services have joined the User's Office to form International Services. The office has moved to the first floor of Wilson Hall on the west side. The contact information is as follows: Amanda Petersen, x4203; Barb Book, x3111; Melissa Clayton Lang, x3933; and John Galvan, x3811. The mail stop is MS 103 and the fax is x3688.

403b counseling Wednesday

Jim Stair from Fidelity Investments will be onsite Wednesday, Jan. 16, to conduct individual counseling sessions for Fermilab employees eligible and participating in the Fermilab 403b. Meetings are scheduled on a first come, first serve basis and will take place in the Aquarium. They generally last 30 minutes and can cover a range of topics from asset allocations to retirement income planning. In order to schedule a meeting go visit www.fidelity.com/atwork/reservations, or call 1-800-642-7131.

Pidgin: Secured Onsite Instant Messaging Client course

A course on Pidgin, an instant messaging client supported by the Computing Division, will be offered Feb. 12 and 14. Learn what instant messaging has to offer and how to use Pidgin. [Learn more and enroll](#)

is part of the [Fermilab Lecture Series](#). The presentation is at 8 p.m. Friday, Jan. 18 in the Ramsey Auditorium. Admission is \$5.

In the News

Japanese particle physics in good health

From *Physicsworld.com*, Jan. 9, 2008

The particle physics community started 2008 with a bad case of the January blues, thanks to major budget cuts announced by the US and UK just before Christmas. But some comfort may be taken from very positive plans for the future unveiled by the Japanese high-energy physics laboratory, KEK.

The 20-page roadmap report outlines an ambitious five-year plan that includes a major upgrade to KEK's flagship "B-factory" and a strong commitment to the proposed International Linear Collider (ILC) — two areas that have suffered greatly as a result of the recent cuts in the UK and US.

"Given the UK's decision to pull out of the ILC and the funding debacle in the US, this report demonstrates the sustained commitment to high-energy physics of the Japanese — who, of course, are one of the leading contenders to host the ILC," says Brian Foster of Oxford University and European director of the ILC global design effort.

[Read more](#)

Scottish country dance Tuesday

Scottish country dancing will meet today, Jan. 15, at Kuhn Barn. Instruction begins at 7:30 p.m. and newcomers are always welcome. Most dances are fully taught and walked through, and you do not need to come with a partner. Call (630) 840-8194 or (630) 584-0825 or [e-mail](#) for more information.

Flu shots available

Fermilab Medical Office has a limited number of flu shots available for active, full-time regular employees or term and temporary employees. Women who are/may be pregnant must bring a doctor's note in order to receive a flu shot. The flu shots are available in the Medical Office by appointment only. Please call x3232 to schedule an appointment. Fermilab ID must be shown at time of scheduled appointment to receive the shot.

[Additional Activities](#)