

Calendar

[Have a safe day!](#)

Thursday, Oct. 14
THERE WILL BE NO THEORETICAL PHYSICS SEMINAR TODAY
3:30 p.m.

DIRECTOR'S COFFEE BREAK- 2nd Flr X-Over

4 p.m.

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

Speaker: Shigeki Kato, KEK
Title: Application of Electro Chemical Buffing onto Niobium SRF Cavity Surfaces

Friday, Oct. 15

3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over

4 p.m.

[Joint Experimental-Theoretical Physics Seminar](#) - One West

Speaker: Bogdan Dobrescu, Fermilab
Title: Heavy Color-Octet Bosons and Multi-b-Jet Signals at the Tevatron

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

[Upcoming conferences](#)

Campaigns

[Take Five](#)

[Tune IT Up](#)

Weather

 Sunny
65°/45°

[Extended Forecast](#)

[Weather at Fermilab](#)

[Current Security Status](#)

InterActions.org Press Release

DESY and TRIUMF take home top prizes from the first Global Particle Physics Photowalk



The Global jury winner: The 8Pi experiment at TRIUMF, taken by Mikey Enriquez, a photographer in Canada.

A sunburst image of a particle detector at Germany's DESY laboratory and a black-and-white photograph of a nuclear-physics experiment at TRIUMF in Canada have won the top prizes in the first-ever Global Particle Physics Photowalk.

More than 100 of the top photographs from the photowalk, including the six winners of the jury and "people's choice" competitions, are now viewable [online](#).

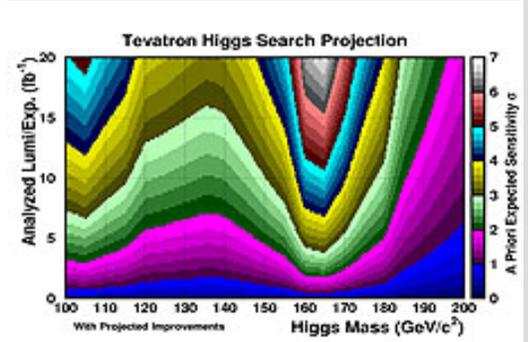
"As scientists, we're excited by our work and our laboratory environment. What was amazing about this event was the opportunity to share that experience with the people who support and benefit from the research we do," said Nigel S. Lockyer, director of TRIUMF. "Bringing it full circle to see what caught their eye and got their attention was the real treat. Art and science have serious parallels; we all struggle to look at things in new ways to generate new insights about what is really going on in our world."

[Read more](#)



Result of the Week

Spokespersons' perspective: The Tevatron and an opportunity to answer one of the most fundamental scientific questions



The amount of luminosity required to be delivered by the Tevatron to see Higgs boson with probability measured in standard deviations or σ . Tevatron physicists expect more than 3σ evidence, which corresponds to 99.7 percent probability, of the Higgs boson with the 16 inverse femtobarns of analyzed luminosity expected by 2014.

Finding the Higgs particle--the last undiscovered particle of the Standard Model, responsible for the generation of masses of elementary particles--is among the most fundamental challenges of modern science. Thanks to the superb performance of Fermilab's Tevatron, the only proton-antiproton collider in the world, the CDF and DZero experiments have the potential to play a leading role in this quest.

The number of high-energy Tevatron collisions has been steadily increasing. Last year was another record year, with the total number of collisions exceeding 100 trillion. To observe the Higgs boson over all of its expected mass range between 115 and 185 GeV, scientists have proposed continuing Tevatron operation beyond its currently planned shutdown in 2011, until 2014, doubling the number of collisions produced so far. This doubled data set would give physicists the opportunity to detect the Higgs boson through its decay into two b quarks. For the favored light Higgs boson mass, this is the most common decay process. Detecting Higgs' decays into b-quarks is critical for establishing that the observed particle is really the Standard Model Higgs boson, complementing searches in other decay modes performed at the LHC.

In June and again in August of this year, Fermilab's Physics Advisory Committee considered a proposal to extend the Tevatron run beyond 2011. The PAC strongly supported the proposal as an "exciting and compelling physics opportunity with potentially historic importance." The proposal resonated strongly in the physics

[Secon Level 3](#)**Wilson Hall Cafe**

Thursday, Oct. 7

- Breakfast: Apple sticks
- Southwestern chicken tortilla
- Philly style cheese steak
- *Garlic herb roasted pork
- Mardi Gras jambalaya
- *Southwestern turkey wrap
- Assorted sliced pizza
- *Marinated grilled chicken Caesar salads

*Carb restricted alternative

[Wilson Hall Cafe Menu](#)**Chez Leon**

Thursday, Oct. 14

Dinner
- Closed

Wednesday, Oct. 21

- Lunch
- Rouladen
- Spaetzel
- Dilled baby carrots
- Apple walnut cake

[Chez Leon Menu](#)

Call x3524 to make your reservation.

Archives**[Fermilab Today](#)**[Director's Corner](#)[Result of the Week](#)[Safety Tip of the Week](#)[CMS Result of the Month](#)[User University Profiles](#)[ILC NewsLine](#)**Info**

People's choice: A wire chamber at DESY taken by Hans-Peter Hildebrandt, a lead technician for a manufacturing company in Germany.

Feature**Fermilab celebrates 25th anniversary of first collisions**

Accelerator Division head Roger Dixon, Director Pier Oddone, Deputy Director Young-Kee Kim and 1985 CDF co-spokesperson Alvin Tollestrup cut four cakes commemorating the 25th anniversary of the first collisions in the Tevatron – known in 1985 as the Energy Doubler or Energy Saver.

Two of the cakes were decorated with circles representing particles, one a proton and the other an antiproton. The cake in between the two featured an event display from some of the first collisions.

Before cutting the cake, Oddone read the following message from CERN Director-General Rolf-Dieter Heuer.

Dear Pier, Young-Kee,

If I am not mistaken, there is a certain anniversary today to be celebrated at Fermilab:

Congratulations from all of CERN to all of Fermilab for the 25th anniversary of the first proton-antiproton collisions at the Tevatron! This is truly a great achievement and one that we at CERN can only aspire to.

What is so impressive about the hard-working and reliable Tevatron is not only the fact that it has run for 25 years, but also that it has run all this time at the energy and the knowledge frontier. We wish the Tevatron even more great achievements for the rest of its career and our colleagues at Fermilab all the best for the next 25 years!

*Greetings,
Rolf*

From *ISGTW*

community in the U.S. and abroad, eliciting many letters of support from a wide range of scientists, from Nobel Prize winners to graduate students, who are excited about the science potential of running the Tevatron for three more years.

[Read more](#)

Tevatron collaborations are made up of more than 1,000 physicists from 27 countries all around the globe. CDF and DZero together per year publish more than 70 papers and present hundreds of new results at international conferences. About 60 Ph.D. candidates on the collaborations defend their dissertations each year. The Tevatron collaborations are two of the most successful and productive scientific enterprises in physics.

Accelerator Update

Oct. 11-13

- Three stores provided ~30.75 hours of luminosity
- MI develops problems
- TeV quenched during shot setup
- MI accessed to repair MRF9 and 15

[Read the Current Accelerator Update](#)[Read the Early Bird Report](#)[View the Tevatron Luminosity Charts](#)**Announcements****Latest Announcements**[Toastmasters - Oct. 21](#)[Down Syndrome Awareness seminar - today](#)[Argentine Tango through Nov. 3](#)[NALWO Autumn potluck luncheon - Oct. 15](#)[Accelerate to a Healthy Lifestyle program](#)[Fright Fest discount tickets at Six Flags](#)[Lion King musical discount](#)

Fermilab Today

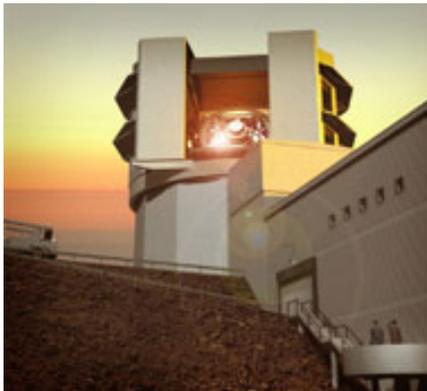
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Astronomical computing



Supporting the Large Synoptic Survey Telescope means thinking big

The Large Synoptic Survey Telescope to be constructed in Chile will incorporate the world's largest digital camera, capable of recording highly detailed data more quickly than any other telescope of comparable resolution.

For the scientists working on the project, that all amounts to an exciting opportunity to learn more about moving objects (including monitoring asteroids near the Earth), transients such as the brief conflagrations of supernovae, dark energy, and the structure of the galaxy.

For computing specialists, it means more data. A lot more data.

[Read more](#)

[Chicago Blackhawks discount tickets](#)

[NALWO Children's Playgroup Halloween party](#)

[Word 2007: New Features class offered Oct. 20](#)

[Excel 2007: New Features class offered Oct. 20](#)

[Regal Movie Theater discount tickets available](#)

[Fermilab Lecture Series presents The Long Thaw: How Humans are Changing the Next 100,000 Years of the Earth's Climate - Oct. 22](#)

[Submit an announcement](#)