

## Calendar

### [Have a safe day!](#)

Thursday, May 20  
9 a.m. - 6:45 p.m.

#### [International Workshop on Heavy Quarkonium](#)

1:30 p.m.

#### [Accelerator Physics and Technology Seminar - Curia II](#)

(NOTE TIME & LOCATION)  
Speaker: Tim Maxwell,  
Northern Illinois University

Title: Optical Beam Position Monitor for Sub-Picosecond Spatio-Temporal Correlation Monitoring  
2:30 p.m.

#### [Theoretical Physics Seminar - Curia II](#)

Speaker: David Reeb,  
University of Oregon  
Title: Gauge Coupling Unification in Non-Supersymmetric GUTs Through Gravitational Effects  
3:30 p.m.

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

Friday, May 21

9 a.m. - 7 p.m.

#### [International Workshop on Heavy Quarkonium](#)

3:30 p.m.

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

4 p.m.

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

Speaker: Eric Braaten, Ohio State University

Title: Stumbling Toward an Understanding of Quarkonium Production (in conjunction with Workshop on Heavy Quarkonium)

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

## Feature

### DASTOW 2010 set for June 24



Children try their hands at firefighting during the 2009 DASTOW.

School-aged children will get a chance to see how education pays off on June 24 when they visit Fermilab for Daughters and Sons to Work day. Fermilab is one of many companies that honors the event in the summer rather than have children miss school in April or May when DASTOW is nationally recognized.

Exposing children to workplaces is one way to show them the value of education, help them understand what their parents or relatives do at work and get them thinking about future career options. For adults, the day showcases how employees and employers strive for a work-life balance.

Fermilab's DASTOW program returns with the traditional favorite activities such as Mr. Freeze's cryogenics show, a trip to see the bison and an Open House favorite from The FUNdamentals of Physics show.

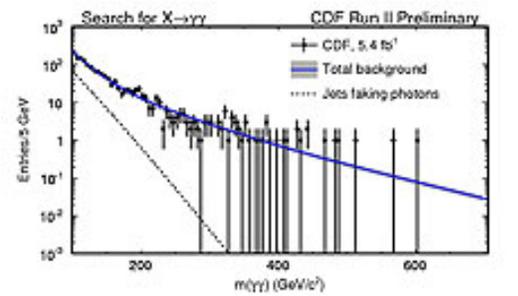
Fermilab will showcase its environmental stewardship with a show-and-tell lecture about Fermilab's wildlife, plants and flowers given by Fermilab Natural Areas, a not-for-profit group. The Fire Department will demonstrate its rescue skills by extracting a dummy staged as a trapped motorist from a wrecked car. They will also land a rescue helicopter on the road near the fire house. Children can take an close look at the helicopter.

Budding astrophysicists will use pipe cleaners to learn how extra dimensions work.

For a complete [schedule of events](#) and to see photos from previous DASTOW events, visit the [DASTOW Web page](#).

## Result of the Week

### Photons shed light on extra dimensions



The invariant mass distribution from CDF data of two high-energy photons with the background prediction shown as the blue line.

One of the many puzzles that modern physicists face is the so-called hierarchy problem. This, simply stated, asks why gravity is so much weaker than the other fundamental forces. In 1999, Lisa Randall and Raman Sundrum proposed a unique extra-dimensional approach to solve the hierarchy problem. They suggested the existence of an undetected spatial dimension, in addition to the four dimensions of ordinary space and time. In this theory, the strength of the gravitational force is weakened by the presence of this extra dimension.

The Randall-Sundrum theory predicts a series of heavy new particles called gravitons. At the Tevatron, such particles would manifest as heavy particles that could decay into photon-photon pairs. CDF physicists tested this theory using Tevatron collision data to look for a narrow peak in the diphoton mass distribution (see the figure above), which might provide evidence for a graviton. Standard Model processes can produce events that mimic the graviton signal, including photons and quark decays that physicists can misidentify as photons. The new result indicates that the data are consistent with the prediction of these backgrounds. Thus, CDF scientists found no evidence of a graviton, but were able to set lower limits that constrain the mass of this hypothetical particle.

-- edited by Craig Group

[Upcoming conferences](#)[Campaigns](#)[Take Five](#)[Tune IT Up](#)[H1N1 Flu](#)

For information about H1N1, visit Fermilab's flu information [site](#).

[Weather](#)

Mostly sunny  
73°/55°

[Extended Forecast](#)  
[Weather at Fermilab](#)

[Current Security Status](#)[Secon Level 3](#)[Wilson Hall Cafe](#)

Thursday, May 20  
- 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](#)

To learn more about the history of the national DASTOW program, started in 1993 as Take Our Daughters to Work program and expanded to include boys in 2003, see the Take Our Daughters And Sons To Work Foundation [Web site](#).

-- Tona Kunz

[Photo of the Day](#)[New employees - May 10](#)

Row 1 from left: Whitney Treadman, ES&H; Kaylee Walsh, WDRS; Zhihao Yuan, PPD; and Randeep Sra, TD. Row 2 from left: Rickey Winfield, CD; Roman Novitski, TD; Russell Kinniard, BSS; Andrew Norman, CD; Curt Baffes, AD; and Jason Koll, FESS.

[In the News](#)

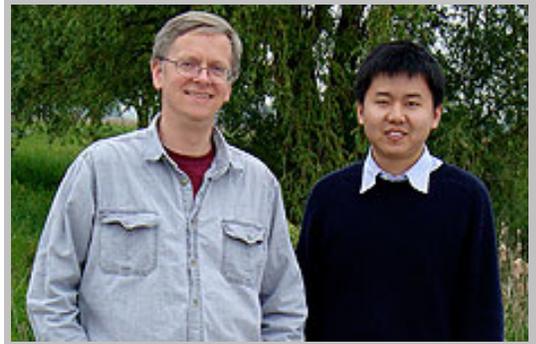
## William P. Hogan recognized with 2010 AAPT Excellence in Undergraduate Physics Teaching Award

From *Physics Today*, May 7, 2010

**Editor's note:** Bill Hogan worked as a postdoc on Fermilab's KTeV experiment.

The American Association of Physics Teachers (AAPT) announced today William P. Hogan is the recipient of the 2010 AAPT Excellence in Undergraduate Physics Teaching Award. Hogan is Professor of Physics at Joliet Junior College, Joliet, IL. This award is in recognition of contributions to undergraduate physics teaching and awardees are chosen for their extraordinary accomplishments in communicating the excitement of physics to their students. This prestigious award will be presented to Hogan during the AAPT Summer Meeting in Portland, Oregon where he will also present a paper.

When informed of his selection for this award, Hogan said, "I'm honored to be chosen. I'm not sure I deserve this award but I love teaching introductory physics and feel very



The Fermilab scientists responsible for this analysis (from left to right): Ray Culbertson and Tingjun Yang.

[Accelerator Update](#)

May 17-19

- Five stores provided ~38.75 hours of luminosity
- T-1005 experiment approved for beam
- BRF18 bypassed
- Linac Klystron LCW leak repaired
- Store 7819 aborted due to CIA crate problem

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

[Announcements](#)[Latest Announcements](#)

[Interaction Management Coaching Forum - July 27](#)

[Introduction to LabVIEW course - July 13](#)

[Embedded Design with LabVIEW FPGA and CompactRIO seminar - July 13](#)

[News at Toastmasters](#)

[Sign up for summer Science Adventures classes](#)

[News for Cigna plan participants](#)

[May habitat restoration - May 22](#)

[May "Benefits Bulletin" now available](#)

[Argentine Tango Wednesdays through May 26](#)

[Pool memberships available now](#)

[NALWO Spring Tea - May 20](#)

Thursday, May 20  
Dinner  
- Gazpacho  
- Paella  
(Saffron rice with seafood & chicken)  
- Torta moca

Wednesday, May 26  
Lunch  
- Blackened chicken tortellini alfredo  
- Blackberry-lemon pudding cake

[Chez Leon Menu](#)

Call x3524 to make your reservation.

fortunate to make my living doing something I enjoy."

Hogan received a Bachelor of Science degree in engineering physics, a Masters of Science in physics, and a Ph.D. in experimental high energy physics all from the University of Illinois at Urbana-Champaign. He accepted an appointment as a post-doctoral research associate with Rutgers University stationed at Fermi National Acceleration Laboratory after finishing his graduate studies. While working at Fermilab, he began teaching physics as an adjunct faculty member at several Chicago-area two-year colleges and decided to pursue a career teaching physics.

[Read more](#)

[Sand Volleyball Tuesdays begin May 25](#)

[43rd Fermilab Users' Meeting - June 2-3, register now](#)

[SciTech summer camps start June 14](#)

[Employee discount at Batavia Rosati's](#)

[Fermilab Arts Series presents Corky Siegel and Chamber Blues - June 26](#)

[ANSYS Mechanical Application classes offered in May](#)

[Additional activities](#)

Archives

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