

Calendar

[Have a safe day!](#)

Thursday, Oct. 7

8 a.m. - 6:45 p.m.

[Workshop on Detector R&D](#)

2:30 p.m.

[Theoretical Physics Seminar](#) -

Curia II

Speaker: Brian Batell,

Perimeter Institute for

Theoretical Physics

Title: New Stabilization

Symmetries for Dark Matter

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

[Accelerator Physics and](#)

[Technology Seminar](#) (NOTE

LOCATION) - Curia II

Speaker: Roger Dixon,

Fermilab

Title: Accelerator Division: The

Division Head's Perspective

Friday, Oct. 8

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

[Joint Experimental-Theoretical](#)

[Physics Seminar](#) - One West

Speaker: Craig Aalseth, Pacific

Northwest National Laboratory

Title: Radiation Detection R&D:

Two High Purity Ge Array

Examples

Saturday, Oct. 9

8 p.m.

[Fermilab Arts Series](#) - Ramsey

Auditorium

Performer: [Suzanne Vega](#)

Tickets: \$29 for adults/\$15 for

18 and under

Click here for [NALCAL](#),

a weekly calendar with

links to additional

information.

[Upcoming conferences](#)

In Memoriam

In memoriam: Mike Yeoward



Mike Yeoward

Image courtesy of [saukvalley.com](#)

Mike Yeoward, senior procurement administrator in the Business Services Section, died Friday, Sept. 24, at the age of 58.

Yeoward had a heart attack after refereeing a football game at Rochelle High School.

His colleagues remember him for his wonderful sense of humor and love of laughter as well as his excellence in contract procurement for Fermilab.

"I think one of the biggest things he did here was to prove that you can work and have a good time," said Procurement Department coworker Ron Evans. "Everyone who worked with him enjoyed him."

Prior to joining Fermilab 10 years ago, Yeoward owned his own business selling large equipment and farm machinery. Fermilab's procurement personnel met him when his company installed equipment for the Main Injector. When a position opened for someone to handle contracts with companies dealing in scientific equipment, Yeoward's mix of technical and business experience made him an obvious choice.

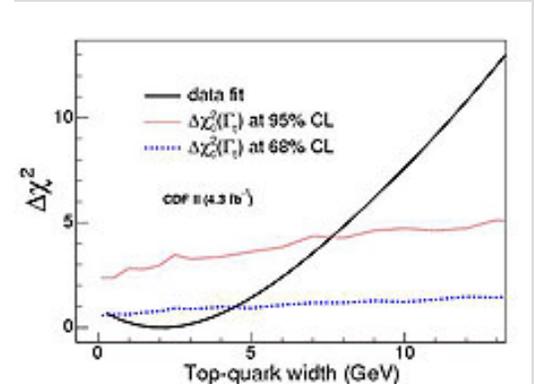
"What set Mike apart was that he could use all his technical skills and his personality to very nicely communicate the needs of the laboratory to people on both sides of contracts," said Procurement Department manager Joe Collins. "He was a tremendous listener."

That sentiment was echoed by TD's Mark Champion, who heads SRF development and who had worked with Yeoward to procure equipment for the International Linear Collider project.

"He was a pleasure to work with, and I was always pleased with the quality of his work on our behalf," Champion said. "I thought highly of him and keenly feel his absence."

Result of the Week

Direct measurement of the top quark width



The figure shows the limits on the top-quark width at 68 percent and 95 percent confidence levels and $\Delta\chi^2$, a parameter used to set the limits.

The top quark has received tremendous attention since its discovery at the Tevatron in 1995. It won fame for being much heavier than any other of the known elementary particles. Its mass is comparable in scale to a gold nucleus.

The top quark's lifetime is another interesting feature. Scientists expect the top quark, unlike other quarks, to decay before it can combine with other quarks to form hadron particles. The time it would take for the top quark to form a hadron is incredibly short (3.3×10^{-24}), and scientists predict that the top quark lifetime is even shorter still. Thus, physicists believe that when they measure the properties of the top quark system, they are looking directly at the top quark itself and not at some complicated hadronic system. This simplifies things, but is this assumption correct?

Precise measurements of the top quark's width could test the completeness of the Standard Model and favor or rule out specific new theories of physics not accounted for in the Standard Model.

To verify the above assumption and as a way to search for new physics, a group of physicists from the University of Chicago performed an analysis to determine whether the lifetime is sufficiently short and that they were actually looking at a regular quark. They did this by measuring the particle's "width," which is inversely proportional to its lifetime. The width of a particle affects the mass distribution of the top quark that Tevatron scientists have studied

Campaigns

[Take Five](#)

[Tune IT Up](#)

Weather



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

Current Security Status

[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. 7

Dinner
- BOOKED

Wednesday, Oct. 13

- Lunch
- Hot & sour coconut soup
 - Wasabi salmon sandwich
 - Cucumber salad
 - Gingered pear crisp

[Chez Leon Menu](#)

Call x3524 to make your reservation.

Archives

Collins said that he felt that Yeoward's death was quite a blow.

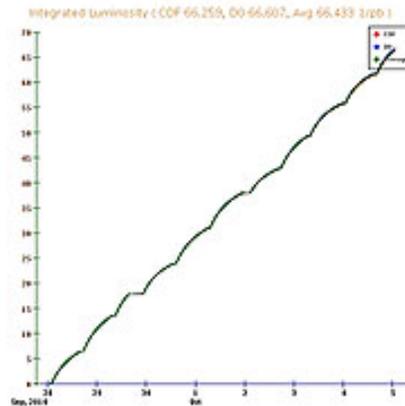
"Mike had a knack for putting people at ease and for making those around him feel understood," Collins said. "I think that's one of the reasons his loss really did sadden everyone associated with him. We were all extremely fortunate to have had the opportunity to have him in our lives."

-- Sara Reardon

[Read](#) Yeoward's obituary.

In the News

Accelerator complex hits integrated luminosity milestone



On Tuesday, the Accelerator complex achieved an integrated 66.433 inverse picobarns in a floating week, the highest integrated luminosity since the shutdown. This is also the highest floating weekly integrated luminosity since two months before the shutdown.

A floating week is any 168 consecutive hours, but not the official week recognized by the Accelerator Division.

"Reaching this level so quickly after a shutdown is a good indicator as to the performance of the Accelerator Complex in general," said Cons Gattuso, Tevatron run coordinator. "This performance was only obtainable by the hard work of everyone at the laboratory."

Feature

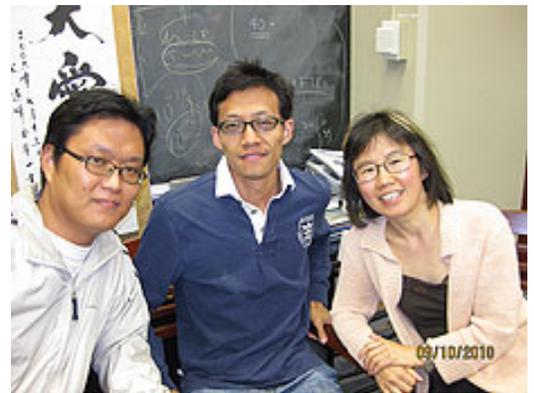
with great precision.

Physicists at CDF have measured the top quark width by comparing the shape of the reconstructed mass distribution of top quarks with a state-of-the-art simulation with various width values. CDF obtained an upper limit for the top quark width of 7.6 GeV at the 95 percent confidence level. This is the first time an upper limit on the top lifetime has been measured. The measurement, which is 2.2×10^{-24} seconds is at the 68 percent confidence level. See the [website](#) for more information on this analysis.

This measurement, which has been submitted to *Physical Review Letters*, supports the Standard Model assertion that the top quark decays before it combines to form hadron particles.

[Read the paper](#)

-- edited by Andy Beretvas



These individuals worked on this analysis: Hyun Su Lee, Jian Tang and Fermilab Deputy Director Young-Kee Kim, all from the University of Chicago.

Accelerator Update

Oct. 4-6

- Four stores provided ~26.5 hours of luminosity
- Meson Septa developed vacuum leak
- TeV sector C4 helium leak required access to fix
- Many machines conducted maintenance during TeV access
- TeV sector C2 dump failure
- MI prepared for access to fix Lambertson vacuum issue

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

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

is online at:

www.fnal.gov/today/

Send comments and suggestions to:

today@fnal.govVisit the Fermilab [home page](#)[Unsubscribe](#) from *Fermilab Today***Friday is the last day to vote for top Photowalk photograph**Vote on your favorite Particle Physics Photowalk photo [now](#).Friday is the last day you can [cast your vote](#) to choose a winner in the "People's Choice" global photowalk competition.On Aug. 7, more than 200 photographers had the rare opportunity to go behind the scenes at five laboratories in Asia, Europe and North America as part of the first [Global Particle Physics Photowalk](#).

Those photographers submitted their photos to the laboratories and were entered into a series of photowalk competitions. You have a chance to decide which image should win the popular public vote.

[Learn more](#)-- *Elizabeth Clements***In the News****Senate confirms Subra Suresh as National Science Foundation Director**From *AIP Bulletin of Science Policy News*, Oct. 6, 2010

The Senate has confirmed Subra Suresh as the new director of the National Science Foundation. He replaces Arden Bement who resigned earlier this year.

Suresh was the Dean of the School of Engineering and the Vannevar Bush Professor of Engineering at the Massachusetts Institute of Technology. Before coming to MIT in 1993, Suresh was on the faculty of Brown University. He received his Bachelor of Technology from the Indian Institute of Technology in 1977, his MS from Iowa State University in 1979, and his ScD from MIT in 1981. Suresh's research has been in the areas of mechanical engineering, materials science, and

Announcements**Latest Announcements**[Card Stampers Club - Oct. 12](#)[Toastmasters - today](#)[Lion King musical discount](#)[Chicago Blackhawks discount tickets](#)[Fermilab Lecture Series presents The Long Thaw: How humans are changing the next 100,000 Years of the Earth's climate - Oct. 22](#)[Fermilab Arts Series presents Suzanne Vega Oct. 9](#)[Accelerate to a Healthy Lifestyle Program](#)[Fright Fest discount tickets at Six Flags](#)[Scrappers Scrapbooking open house](#)[Autism Awareness Seminar - today](#)[School's Out Day Camp](#)[Fibromyalgia awareness seminar - Oct. 11](#)[Mental Health Awareness Part II - Oct. 12](#)[Down Syndrome Awareness Seminar - Oct. 13](#)[Access 2007: Intro class offered Oct. 13](#)[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](#)[Submit an announcement](#)

biomedical engineering.

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