

Calendar

Thursday, Dec. 4

2:30 p.m.

[Theoretical Physics Seminar](#) -

Curia II

Speaker: Henrik Johansson,
University of California, Los Angeles

Title: Superfiniteness of N=8
Supergravity at Three Loops
and Beyond

3:30 p.m.

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

Friday, Dec. 5

3:30 p.m.

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

4 p.m.

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

Speaker: Andrew Ivanov,
University of California, Davis

Title: The Truth the Top Quark
is Hiding

8 p.m.

[Fermilab International Film
Society](#) - Auditorium

Tickets: Adults \$5

Title: [My Left Foot](#)

Saturday, Dec. 6

8 p.m.

[Fermilab Arts Series](#) -

Auditorium

Tickets: \$22/\$11

Title: [A Renaissance
Christmas: Music and Dance
with Renaissomics](#)

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

Weather



Chance flurries
24°/7°

[Extended Forecast
Weather at Fermilab](#)

Feature

Nancy Grossman named new ES&H director

Nancy Grossman will succeed Bill Griffing as head of the laboratory's ES&H Section.

Grossman (pronounced growsman) officially took over the position on Dec. 1, but will transition into the role during the next few months as she finishes up work on her current projects, including her role as associate project manager for NOvA.

Griffing, who plans to retire later this year after nearly 13 years as the laboratory's ES&H director, sees Grossman as an ideal successor, particularly as the laboratory plans its future projects.

"I'm very excited about Nancy's appointment as head of ES&H," said Fermilab Director Pier Oddone. "She follows a strong path Griff set overseeing the transition to a safety culture that we're very proud of at Fermilab. I look forward to her taking it to the next level."



Bill Griffing

Grossman has acquired a wide range of skills during her 15 years at Fermilab. Her first permanent position at the laboratory was as a radiation physicist in ES&H Section. As part of that role, she was the radiation safety officer for the PET project. She also served as liaison between ES&H and AD and performed the section's quality assurance. Grossman left ES&H in 1998 to work as a level 3 manager on the NuMI neutrino project. She was later promoted to deputy project manager on the beamline, and was heavily involved in designing shielding for that experiment. She also has management experience with the MINERvA and SNUMI projects.

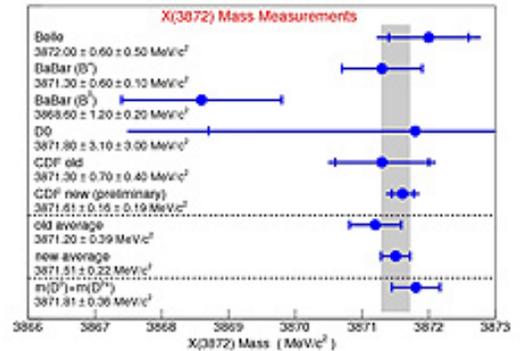
"Nancy has experience in working with our



Nancy Grossman

Fermilab Result of the Week

Who is Mister X?



Comparison of the CDF new mass measurement using world's largest sample of X(3872) signal events to previous measurements and sum of the D⁰ and D^{0*} masses.

Quarks are one of the elementary building blocks of matter. They are strange objects in the sense that scientists never observe them as individual free particles, but always in the form of hadrons, bound states of either three quarks, which create a baryon, or one quark and one anti-quark, which create a meson. The well-understood theory describing the interaction of quarks does not explicitly rule out exotic combinations of more than three quarks, but most physicists do not expect them to exist.

Scientists observed the first out of a series of hadrons that are candidates for such exotic states, the X(3872), in 2003. Physicists still do not know the internal structure of the X(3872). The two most popular explanations are that it is a molecular bound state composed of two mesons, the D⁰ and D^{0*}, or that it is composed of four quarks.

Recently, CDF physicists used the world's largest sample of Xs(3872) decaying into two well-known mesons, the J/ψ π⁺ π⁻, to perform a detailed study of X's mass shape. They conclude that it is compatible with the assumption of a single state, and this result disfavors the four-quark model, which predicts two states with similar mass. The physicists precisely measured a mass slightly below the sum of the D⁰ and D^{0*} masses, which is compatible with X(3872) being a molecular state.

The precision of the CDF mass measurement clearly dominates the world average (as seen

Current Security Status

[Secon Level 3](#)

Wilson Hall Cafe

Thursday, Dec. 4

- Santa Fe black bean
- Steak tacos
- Chicken Wellington
- Chimichangas
- Baked ham & swiss on a ciabatta roll
- Assorted sliced pizza
- Crispy fried chicken ranch salad

[Wilson Hall Cafe menu](#)

Chez Leon

Thursday, Dec. 4

- Dinner
- Coquilles Saint Jacques
 - Duck breast
 - Nutted wild rice
 - Julienne of peppers
 - Apple walnut cake w/ calvados cream

Wednesday, Dec. 10

- Lunch
- Sweet & sour chicken
 - Jasmine rice
 - Egg roll
 - Almond Cake

[Chez Leon menu](#)

Call x3524 to make your reservation.

Archives

Fermilab Today

[Result of the Week](#)

[Safety Tip of the Week](#)

[ILC NewsLine](#)

Info

funding agency. She also has an understanding and appreciation for the science that goes on here. The tendency of most safety professionals is to quickly reject any proposals that they think are too risky from a safety perspective," Griffing said. "I feel that Nancy will work with her staff and project teams to find acceptable solutions for getting the work done safely and with the least environmental impact."

[Read more](#)

-- *Rhianna Wisniewski*

In Brief

Exhibits return from SC08



Fermilab's exhibit from the SC08 conference, the spiral.

The exhibits that Fermilab's Computing Division set up at SC08, an annual supercomputing conference, are now on display in the Wilson Hall atrium. Stop by and see the spiral, a historical timeline of Fermilab's computing history, and a musical model of the CDMS experiment.



A musical model of the CDMS experiment, now on display in the Wilson Hall atrium. [Learn more about this model.](#)

in the figure) and hands over the $X(3872)$ quest for a more precise determination of the D^0 and D^{0*} masses.

[Read more](#)



Left to right: Michael Feindt, Thomas Kuhr, Joachim Heuser, Michal Kreps, all of the University of Karlsruhe.

Accelerator Update

Dec. 1-3

- Three stores provided ~34 hours of luminosity
- Cryo system cold box problem fixed
- Store 6605 - second best luminosity: 339.19E30
- Store 6606 - third best luminosity: 335.6E30

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

Announcements

[Have a safe day!](#)

[Submit an announcement](#)

[Annual enrollment through Dec. 10](#)

[Annual enrollment carrier meetings Dec. 4, 9](#)

["Atom Smashers" DVD discount](#)

[Fidelity Representative at Fermilab Dec. 3](#)

[Education Office Holiday Sale, Dec. 3 & 4](#)

[International Folk Dancing, Dec. 4](#)

[NALWO - Winter Holiday Tea, Dec. 5](#)

[Fermilab Film - "My Left Foot" Dec. 5 at 8 p.m.](#)

Fermilab Today

is online at:

www.fnal.gov/today/

Send comments and

suggestions to:

today@fnal.gov

Photo of the Day

Gravitational wave detector group visits Fermilab



Members from GEO600, the German-British gravitational wave detector, visited Fermilab this week. From left: Harold Lück, Albert Einstein Institute in Hamburg, Germany; Stefan Hild, University of Birmingham; and Harmut Grote, Albert Einstein Institute in Hamburg, Germany. Hild gave an overview of the most important noise sources limiting the performance of gravitational wave detectors. The presentation, which took place on Dec. 1, comes after Craig Hogan, the head of the Center for Particle Astrophysics published a paper on the mystery noise he can see in the gravitational wave detector. Information about Hogan's observation of the mystery noise is available on a [Nov. 10 article](#) in *Nature*.

[Carols for Dancing - A Renaissance Christmas at Fermilab, Dec. 6](#)

[English Country Dancing, Dec. 7](#)

[NALWO - A Russian Style New Year](#)

[FileMaker Pro 8.0 - Dec. 10](#)

[NALWO - Christkindlmarket Chicago, Dec. 13](#)

[Barn Dance Dec. 14](#)

[Fermilab Blood Drive Dec. 16, 17](#)

[The University of Chicago Tuition Remission Program deadline Dec. 17](#)

[Barn Dance Dec. 21](#)

[Find carpool partners with PACE](#)

[Python Programming - Jan. 6 - 8](#)

[Intermediate / Advanced Python Programming - Jan. 27 - 29](#)

[Additional Activities](#)

[Submit an announcement](#)