

Calendar

[Have a safe day!](#)

Wednesday, Oct. 6
12:30 - 1:30 p.m.
[Physics for Everyone lecture](#) -
Ramsey Auditorium
Speaker: Herman White
Title: Fermilab: How we got here and where we're going
3:30 p.m.
DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
4 p.m.
[Fermilab Colloquium](#) - One

West
Speaker: Satish V. Kulkarni, U. S. Embassy, New Delhi, India
Title: US - India Partnership in Science and Technology, Environment and Health: Opportunities and Challenges

Thursday, Oct. 7
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

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

[Upcoming conferences](#)

Campaigns

Special Announcement

Physics for Everyone lecture begins at 12:30 p.m. today

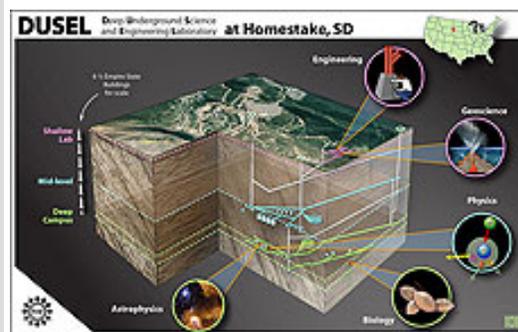


"Physics for Everyone" is a non-technical lecture series about Fermilab science and culture. The first lecture will take place from 12:30-1:30 p.m. today, in Ramsey Auditorium.

Scientist Herman White will discuss the laboratory's past and present and take a look at some of the areas Fermilab will focus on in the future. There will be time for questions and answers. Please come to learn about the laboratory.

From *symmetry breaking*

Diverse group to go deep for science



A graphic summarizing the various kinds of scientific experiments that could take place in the proposed Deep Underground Science and Engineering Laboratory. Credit: NSF

Physicists may soon be burying their dark matter detectors and other fun toys far beneath the South Dakota hills, but they won't be the only ones who get to play in the dirt.

Scientists involved in the proposed Deep Underground Science and Engineering Laboratory recently convened to showcase various experiments that could take advantage of great depths in a mine that extends more than 8,000 feet below the earth's surface. Though particle physics research is the driving force behind the DUSEL initiative, biologists, geoscientists and engineers would also get to

From Particle Physics Division

Technical Centers Department prepares for the future

Rick Ford, head of the Technical Centers Department, wrote this week's column.



Juan Estrada and Rick Ford

In early summer, I became the department head for the Particle Physics Division's Technical Centers department; Juan Estrada became deputy head. Tech Centers provides expertise and support to build the extraordinary detectors required for discoveries in particle physics. The department is also responsible for the alignment of Fermilab accelerators and beamlines. Tech Centers comprises the following groups: alignment and metrology, thin films, scintillator detector, machine development and maintenance, carbon fiber, detector support, TV and the silicon detector center.

Scientists and engineers not just from Fermilab but from projects across the world use Tech Centers facilities. As Fermilab transitions to the post-Tevatron era, Juan and I, along with John Krider, the head of SiDet, are committed to further strengthen Fermilab's role as a world-class detector development facility supporting a wide range of particle physics projects.

SiDet staff and facilities, for example, are at the heart of R&D and production for the Dark Energy Camera, a 500-megapixel, wide-field imager using charge-coupled devices. Applied to the DECam project, Tech Centers' detector expertise established Fermilab as a leading laboratory for astronomical instrumentation.

[Take Five](#)[Tune IT Up](#)[Weather](#)


Mostly Sunny
73°/47°

[Extended Forecast
Weather at Fermilab](#)[Current Security
Status](#)[Secon Level 3](#)[Wilson Hall Cafe](#)

Wednesday, Oct. 6
- Breakfast: English muffin sandwich
- Portobello harvest grain
- Santa Fe chicken quesadilla
- Hoisin chicken
- Parmesan fish
- Cuban panini
- Assorted sliced pizza
- Cavatappia pasta w/Italian sausage

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

Wednesday, Oct. 6
Lunch
- Herb-roasted cornish hen
- Sage & onion stuffing
- Steamed broccoli
- Pumpkin cheesecake

Thursday, Oct. 7
Dinner
- BOOKED

[Chez Leon Menu](#)

Call x3524 to make your reservation.

[Archives](#)

experiment in the colossal caverns of the closed Homestake Mine near Lead, South Dakota.

Derek Elsworth, professor of energy and geoenvironmental engineering at Pennsylvania State University, and William Roggenthen, DUSEL project director and scientist at the South Dakota School of Mines & Technology, recently presented the scope of possible biology, geosciences and engineering research at DUSEL at the first meeting of the DUSEL Research Association users' group, which convened Fermilab in September.

If completed, DUSEL would be the world's deepest dedicated science laboratory underground. It would provide research space for 30 to 50 years, longer than other underground laboratories located in active mines could provide. These extensive time and space scales would provide biologists, geoscientists and engineers with an unprecedented research playground.

[Read more](#)

-- Leah Hesla

[Special Announcement](#)**EAP offers free depression screenings today**

Have you ever wondered if you have the blues or if it is clinical depression? According to the National Institute of Mental Health, 9.5 percent of adults experience clinical depression each year. On Wednesday, October 6, Fermilab's Employee Assistance Program, in conjunction with National Depression Screening Day, will offer free depression screenings to all interested employees and/or their adult family members. Screenings will take place from 9 a. m. – 5 p.m. Employees can make appointments by calling x3591 or [e-mailing](#) EAP counselor Ginny Stack.

[In the News](#)

Thanks to DECam, Tech Centers now features a powerful CCD characterization laboratory and packaging facility, valuable tools for future large astronomical instruments. This combined with our silicon photomultiplier and phototube characterization facility confers impressive photon-detection capabilities with applications from precision calorimetry to medical physics.

The alignment and metrology group recently obtained a state-of-the-art laser scanner for the NOVA project. We will use it to determine the exact location of the surface points of each extrusion plane in the gigantic NOVA far detector. The potential uses of such devices— are enormous.

To learn more about emerging detector technologies, drop by this week's [Detector R&D Workshop](#).

[Safety Update](#)**ES&H weekly report, Oct. 5**

This week's safety report, compiled by the Fermilab ES&H section, includes one recordable incident. Find the full report [here](#).

[Safety report archive](#)

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

[Lion King musical discount](#)

[Chicago Blackhawks discount tickets](#)

[Indian Creek road closed at 7 a.m. today](#)

[Physics for Everyone lecture series begins today in Auditorium](#)

[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](#)

[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/

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today@fnal.govVisit the Fermilab [home page](#)[Unsubscribe](#) from *Fermilab Today***The awesome power of galaxy cluster mergers**From *Discovery News*, Oct. 2, 2010

The scales are mind-boggling and the physics is cutting edge, so how do you go about simulating the collision of two galactic clusters? Using some of the most powerful computers in the world, researchers at Argonne National Laboratory, the Flash Center at the University of Chicago and the Harvard-Smithsonian Center for Astrophysics have done just that.

A galactic cluster is a group of galaxies held together under their mutual gravity.

Occasionally -- during universal history spanning time scales of billions of years -- two clusters will slam into each other at breakneck speeds. But considering these collisions occur in volumes of space measuring in the megaparsecs (one megaparsec is equal to over 3.2 million light-years), it's easy to see why these events take billions of years to merge.

[Read more](#)[Flags](#)[Mental Health Seminar, Part I - today](#)[Scrappers Scrapbooking Open House](#)[Autism Awareness Seminar - today](#)[Toastmasters - Oct. 7](#)[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](#)