

Calendar

[Have a safe day!](#)

Monday, Aug. 16
 THERE WILL BE NO
 PARTICLE ASTROPHYSICS
 SEMINAR THIS WEEK
 3:30 p.m.
 DIRECTOR'S COFFEE
 BREAK - 2nd Flr X-Over
 4 p.m.
 All Experimenters' Meeting -
 Curia II
 Special Topics: Vacuum rf
 Studies in the MuCool Test
 Area (MTA); First Operation of
 the COUPP 60kg Chamber
 Underground

Tuesday, Aug. 17
 3:30 p.m.
 DIRECTOR'S COFFEE
 BREAK - 2nd Flr X-Over
 4 p.m.
[Accelerator Physics and
 Technology Seminar](#) - Curia II
 (NOTE LOCATION)
 Speaker: Alan Krisch,
 University of Michigan
 Title: Hard Collisions of
 Polarized Protons: Past,
 Present and Future

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

[Upcoming conferences](#)

Campaigns

[Take Five](#)

[Tune IT Up](#)

Weather

From *symmetry breaking*

Dark energy studies top astronomy and astrophysics priorities

High-energy physics interests are ranked highly in the decadal study of astronomy and astrophysics priorities released by a National Research Council committee today. The top-ranked projects in "New Worlds, New Horizons in Astronomy and Astrophysics" include studies of dark energy and dark matter although a strong emphasis on extra-solar planet astronomy pushed some high-energy physics further down the list.

Topping the list for large-scale ground-based projects is LSST, the Large Synoptic Survey Telescope, which would image over half the sky every three nights. Its 8.4-meter telescope in Chile will create a 3D map of the universe, locating dark matter and characterizing the properties of dark energy. You can read more about LSST and the search for dark energy in a symmetry feature illustrated by Roz Chast, the largest digital camera ever created, and the work needed to store all the data LSST will collect.

The large-scale space-based list is led by a newly named project WFIRST, the Wide-Field Infrared Survey Telescope. It will use three different techniques to explore dark energy from space with the big advantage that it can see deep into the infrared spectrum. That is important for observing the most distant supernovae, a key component in understanding dark energy. The design of WFIRST is based on one of the proposed designs for the Joint Dark Energy Mission between NASA and the US Department of Energy, but those proposals had been put on ice until this report came out. WFIRST adds some extra capabilities to the JDEM "Omega" proposal, including a search for extra-solar planets.

[Read more](#)

Feature

ES&H Tips of the Week - Safety

The dangers of laser pointers



There are hazards associated with laser pointers. Make sure you are using laser pointers with outputs at or lower than 5 mW. Manufacturers often use the same external hardware for a range of laser products. The device on the left is an FDA-compliant laser pointer with an output of 1 mW. The one on the right is a portable handheld laser rated at 200 mW.

As Fermilab's laser safety officer, I often get asked whether laser pointers are dangerous.

If you use approved low-power models correctly, permanent injuries are very unlikely. However, other models can cause eye damage.

The Food and Drug Administration limits laser pointer output to 5 mW. At this intensity, people are protected by an aversion response – a blink reflex faster than the 0.25 seconds it takes to produce a retinal injury. Permanent injuries from 5 mW lasers are rare and typically require intentionally staring into the beam for 10 to 60 seconds.

Unfortunately, anyone can buy a laser that exceeds 5 mW and believe he or she is getting an FDA-compliant laser pointer. The higher-power devices look like, are marketed as and can be priced like laser pointers. It was easy for me to find a 50 mW green laser pointer on the internet for \$10. At this power, even a quick sweep across an iris can be hazardous.

Here are some ways to prevent eye injuries from laser pointers:

- Make sure the laser pointer output is 5 mW or less. In order to use a higher power laser at Fermilab, operators must receive laser training and a laser eye exam. Laser pointer users must maintain minimum



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

[Current Security Status](#)

[Secon Level 3](#)

[Wilson Hall Cafe](#)

Monday, Aug. 16

- Breakfast: Croissant sandwich
- French Quarter gumbo soup
- French dip w/ horseradish cream
- Santa Fe pork stew
- Country baked chicken
- Popcorn shrimp wrap
- Assorted sliced pizza
- Sweet and sour chicken w/ egg roll

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

Wednesday, Aug. 18
Lunch

- Chicken, rice & tropical fruit salad
- Herbed green beans
- Cream puff w/ ice cream & caramel sauce

Thursday, Aug. 19
Dinner

- Garden salad
- Grilled swordfish
- Lemongrass rice
- Steamed green beans
- Lemon Napoleon

[Chez Leon Menu](#)

Call x3524 to make your reservation.

[Archives](#)

New FAQ about Fermilab's performance review process

WDRS launched a [website](#) on June 30 to provide employees with the tools and information they need to successfully complete the performance review process. Below are some questions and answers recently posted to the website's [Q&A section](#).

Q. It seems that as each employee in a unit becomes more skilled, the performance-expectation bar rises. Doesn't this eventually make everyone average?

A. If you look closely at the performance rating definitions, you will be unable to find "average". "Commendable", which holds the third or middle spot in the performance review, is defined as: Good, solid performance. Fulfills all position requirements and goals and may, on occasion, generate results above those expected of the position. That definition implies much more than an average performance level or an average employee.

Q. Isn't a "2" rating (Fully Competent) the same as a "D", and isn't that basically saying the employee is below average when compared to others at Fermilab?

A. The performance review process isn't the same as the academic grading scale. Employees should pay attention to the wording of the performance rating definitions and how those definitions relate to the body of work completed.

[Read more](#) frequently asked questions and answers.

[In the News](#)

The people's pulsar

From *Science News*, Aug. 13, 2010

Volunteer computing project discovers neutron star

Devil schmevil. Idle computers are doing scientists' work, helping researchers make all kinds of advances in fields from epidemiology to nanoscience to mathematics. Now home computers crunching away in Iowa and Germany have helped astronomers discover a neutron star known as a pulsar, a research team reports online August 12 in *Science*.

The discovery is another example of how programs downloaded to home and office computers can help analyze mountains of

distances between the beam and the audience. See [Fermilab ES&H Manual chapter 5062.1](#).

- Only purchase products from reputable vendors to ensure the quality of the product.
- Read manufacturer specifications to make sure you're purchasing a product with the proper output. Manufacturers often use the same external hardware for a range of laser products.
- Do not stare into the beam.
- Do not point the beam at people, vehicles or shiny objects. The reflection can still cause damage.

-- *Tim Miller, associate head of ES&H*

[Safety Tip of the Week Archive](#)

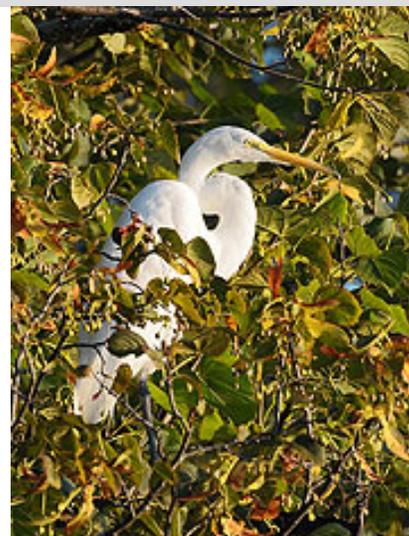
[Special Announcement](#)

Save the date: All-hands meeting Thursday

As part of his visit to Fermilab on Thursday, Aug. 19, Department of Energy Deputy Secretary Daniel Poneman will hold an all-hands meeting at 11:15 a.m. in Ramsey Auditorium. *Fermilab Today* will report more details as they become available.

[Photo of the Day](#)

Up a tree



AD's Greg Vogel submitted this photo of an egret in a tree near Swan Lake. The image was taken in the morning of Aug. 11.

[Announcements](#)

[Fermilab Today](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[CMS Result of the Month](#)

[User University Profiles](#)

[ILC NewsLine](#)

data, says physicist Francois Grey, coordinator of the Citizen Cyberscience Centre, a partnership of CERN, the University of Geneva and the United Nations Institute for Training and Research. Enabled by the sophistication of modern web browsers and graphics technologies, plus huge increases in home Internet bandwidth, these volunteer computing projects contribute time and wattage that can add up to power greater than that of a supercomputer.

[Read more](#)

Info

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Today

Latest Announcements

[Fermilab blood drive Aug. 30 and 31 \(walk in only\)](#)

[H1N1 Temporary Sick Leave policy removed](#)

[Argentine Tango, Wednesdays through Aug. 25](#)

[Bristol Renaissance Faire discount](#)

[Aug. 20 deadline for The University of Chicago Tuition Remission Program](#)

[Applications for URA Visiting Scholars Awards due Aug. 20](#)

[Regal Movie Theater discount tickets available](#)

[What's New with NI and the latest version of LabVIEW \(NI Week highlights\)? - Aug. 19](#)

[Fermilab Blood Drive Aug. 30 and 31 \(Walk in only\)](#)

[Gizmo Guys - Fermilab Arts Series - Sept. 25](#)

[Submit an announcement](#)