

Calendar

[Have a safe day!](#)

Tuesday, June 30

12 p.m.

[Summer Lecture Series - One](#)

West (NOTE LOCATION)

Speaker: Gaston Gutierrez,
FermilabTitle: Top, Higgs, and
Searches at the Tevatron
3:30 p.m.DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
THERE WILL BE NO
ACCELERATOR PHYSICS
AND TECHNOLOGY
SEMINAR TODAYWednesday, July 1
3:30 p.m.DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
THERE WILL BE NO
FERMILAB COLLOQUIUM
THIS WEEK[Click here](#) for NALCAL,
a weekly calendar with
links to additional
information.

Campaigns

Take Five

[Tune IT Up](#)

Weather

 Sunny
69°/53°
[Extended Forecast](#)[Weather at Fermilab](#)Current Security
Status[Secon Level 3](#)

Wilson Hall Cafe

Feature

CDF's "siliconers" are first line of detector defense

Clockwise: Satyajit Behari, Mark Mathis, Oscar Gonzalez-Lopez, Thomas Junk, Miguel Mondragon, Ricardo Eusebi, Alexander Sukhanov, John Freeman and Sergo Jindariani.

Every Monday morning at 10:30 a.m. in CDF, like the Olympic torch hand off, one silicon detector group member passes the shift pager to another.

"Silicon detector experts are the first line of defense when problems arise," said Sergo Jindariani, co-leader of the silicon detector group.

The silicon detector, which was installed in 2001 for CDF's Run II, is the prototype CMS and ATLAS were modeled after. This makes the information the CDF detector takes crucial for the LHC. The detector precisely measures a particle's trajectory or path.

"Silicon detectors give us access to physics that we could not do otherwise. Their level of precision has changed the paradigm in hadron collider physics," said Rob Roser, CDF co-spokesperson.

In order to get such precise measurements, the silicon detector is located next to the beampipe, a very harsh environment for its delicate sensors.

To keep the detector running well, a team of 13 silicon detector specialists take turns in week-long, 24/7 shifts watching over and responding to any problems with the detector seen by the shift crew in the CDF Main Control Room. Each expert on shift cannot be more than 20 minutes away from CDF and must be near a computer that has the software necessary to fix the problem. During major

Director's Corner

Protective equipment

Traffic Safety Subcommittee member and avid bicyclist David Peterson (left front) and bicyclist Jamieson Olsen help Legal Office General Counsel Gary Leonard design protective equipment for an egg during a demonstration at Monday's ES&H Fair.

The importance of using protective equipment when carrying out hazardous tasks cannot be overemphasized. Yesterday, during lunch time, we had an ES&H fair where we had the opportunity to meet our senior safety officers, our firefighters and emergency personnel and the chance to inspect protective gear at several tables. Safety gear needs to be well designed, but also must be worn! After the fair I received the following e-mail message from Traffic Safety Subcommittee member David Peterson, which I reproduce below to encourage you to always wear a helmet when you ride and use the appropriate protective equipment for any task you perform. Safety equipment can save your life.

From: David Peterson
Sent: Monday, June 29, 2009 4:59 PM
Subject: Helmet Safety Egg Drop Results

The Bicycle table at the ES&H Fair on Monday included a demonstration of why it is important to wear a helmet when doing any sort of high energy activity such as skating, biking, skiing, skydiving, etc. Regular store-bought eggs were provided by Jamieson Olsen and participants could build "helmets" for their eggs using plastic or styrofoam cups, soft foam packing sheets and clear food wrap. Success was judged by how high a fall the egg would survive without cracking.

- Tuesday, June 30
- Golden broccoli & cheese
 - Southern style fish sandwich
 - Coconut crusted tilapia
 - Burgundy beef tips
 - La grande sandwich
 - Assorted sliced pizza
 - Chicken fajitas

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

Wednesday, July 1

- Lunch
- Pork satay
 - Jasmine rice
 - Peapods
 - Coconut cake w/ caramel sauce

Thursday, July 2

Dinner

- Fresh mozzarella, tomato & basil salad
- Crusted shrimp w/ saffron sauce
- Latin fried rice
- Pineapple upside cake

[Chez Leon Menu](#)

Call x3524 to make your reservation.

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

detector access, silicon detector group members, or siliconers, must be present in the CDF main control room.

"You have to be vigilant and very alert all the time," said Satyajit Behari, co-leader of the CDF silicon detector group.

Although the lifestyle of a siliconer can be hectic at times, the dedicated members of the group know their work is important to new physics discoveries. Because of their diligence, more than 90 percent of the detector's channels are operational eight years later, and there have been no major detector failure incidents in the past three years.

The experts are trained to address operational issues in data taking. Each one must take eight to 10 shifts a year, although there are times, like an electronics board failure, when additional experts may need to come in. Sometimes former members of the group are called in to help, which they do without hesitation.

"Once a siliconer, always a siliconer," both Behari and Jindariani said in unison.

-- Tia Jones

Feature**Fermilab's daycare students give to children of Gran Sasso**

The area near Gran Sasso laboratory in Italy was hard hit by the April 5 earthquake near L'Aquila. To help employee's children stay close to their parents during this difficult time, Gran Sasso began a childcare program. The children of Fermilab's daycare, The Children's Center, wrote a letter, drew pictures and a banner and collected art supplies for the children of Gran Sasso.



Students from Fermilab's daycare made paintings, such as the one above, for the children of Gran

Results are:

The Reckless Endangerment Award goes to Eric Mieland of ES&H whose helmetless egg did not even survive a 2 inch (5 cm) drop onto the table. This was our "calibration" standard.

3rd Place - Cedric Madison, 2' 6" (76 cm). A 3' 6" (107 cm) attempt was successful on the first bounce but the egg popped out of the cup and broke on the second bounce.

2nd Place - Gary Leonard, 5' 7" (170 cm). An attempt at 6' (183 cm) was not successful but the egg injury lawsuit is still pending. (Gary considers himself to have won 1st Place in the "Non-Technical" category.)

1st Place - Pier Oddone assisted by Vladimir Shiltsev, 6' 2" (188 cm) (or epsilon over one standard Vladimir). Pier used coins to keep the center of mass low in the Styrofoam cup, Vladimir picked the best looking egg and carefully positioned it in the foam padding. They wrapped the entire unit in food wrap to keep the egg from bouncing out. Impact broke the cup and sent the coins flying but the egg survived!

Congratulations to All!

Q&A**Take Five Q&A**

Q. In her *Fermilab Today* column on [June 24](#), ES&H Section Head Nancy Grossman says "If something does not look right or is not going as planned, stop the work and Take Five to think about what is happening." Can you explain the "stop work" policy at Fermilab? Can anyone stop work if it looks unsafe, or is it only a supervisor? In practice, how does this work?

A. From Director's Policy #3 ES&H: "Every person has the right and responsibility to stop work or decline to perform an assigned task because of a reasonable belief that the task poses an imminent risk of death, serious physical or environmental harm, or other hazards to workers. No one will be subjected to reprisal for taking such an action or for raising a concern."

Any person has the right to stop work, not just supervisors. When a person stops work, they should follow up with the supervisor or task manager on the job to resolve the safety or environmental issue. The D/S/C Senior Safety Officer and/or Environmental Officer may be consulted to help resolve the concern.

Fermilab Today
is online at:
www.fnal.gov/today/

Send comments and
suggestions to:
today@fnal.gov

Visit the Fermilab
[home page](#)

Sasso.



Fermilab's daycare students made a banner to greet the children of Gran Sasso.

[Read the letter](#) (pdf) from children at Fermilab's daycare to the children of Gran Sasso.

If you would like to donate art supplies for the children of Gran Sasso, you can bring them to the Office of Communication on the eastside atrium level of Wilson Hall.

In the News

Eight ways scientists look at—but don't yet see—dark matter

From *Discover magazine*, June 22, 2009

Scientists hunt for the unseen matter that glues together the cosmos. But some wonder whether it even exists.

The Galactic Cushion

The Hubble Space Telescope recently beamed back pictures of 29 dwarf galaxies in the Perseus Cluster that, by all appearances, should have been torn to shreds by the gravitational tidal forces of their giant neighbors. Instead, like islands of calm in a stormy sea, the little galaxies remain stable and intact. A team of European astronomers says the secret to their cohesion is a cushion of dark matter that protects them from the gravitational tug-of-war outside. Dark matter, believed to be particularly abundant in dwarf galaxies like these, counteracts the pull of the nearby giants, leaving the smaller galaxies in peace.

Hubble's findings mark the next step in a major research effort aimed at understanding some of the strangest stuff in the cosmos. Dark matter neither emits nor reflects light and cannot be observed directly, posing a challenge for scientists. Although dark matter is thought to be five times as abundant as "normal" matter, finding enough to study has proven difficult.

[Read more](#)

To ask questions about working safely during the shutdown or about the Take Five campaign, visit the [Take Five Web site](#).

Announcements

Latest Announcements

[Artist Within - pick up artwork July 7 from 8 a.m. to noon](#)

[Free Webinar on car buying, July 8](#)

[Reminder: Changes to FTL system](#)

[Time to complete accomplishment reports](#)

[Arrowhead golf league hole-in-one](#)

[Bristol Renaissance Faire discount tickets](#)

[On-site housing-fall 2009/spring 2010](#)

[Six Flags Great America discount tickets](#)

[Pool memberships available in the Recreation Department](#)

[Interaction Management and Performance Review courses scheduled for summer 2009](#)

[Discount for SciTech Summer Camps - July 6](#)

[Introduction to LabVIEW - July 8 and Dec. 8](#)

[MATLAB software tools 75 percent off for Fermilab - July 15](#)

[Intermediate/Advanced Python Programming July 22-24](#)

[Outlook 2007: New Features class Aug. 6](#)

[Process piping \(ASME B31.3\) class offered in October](#)

[Additional Activities](#)

[Submit an announcement](#)

