

Calendar

[Have a safe day!](#)

Wednesday, June 23

3:30 p.m.

DIRECTOR'S COFFEE BREAK
THERE WILL BE NO FERMILAB
COLLOQUIUM THIS WEEK

Thursday, June 24

2:30 p.m.

[Theoretical Physics Seminar](#) - Curia II

Speaker: Jure Zupan, University of
Ljubljana

Title: Implications of Like-Sign
Dimuon Anomaly

3:30 p.m.

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

THERE WILL BE NO
ACCELERATOR PHYSICS AND
TECHNOLOGY SEMINAR TODAY

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

[Upcoming conferences](#)

Campaigns

[Take Five](#)

[Tune IT Up](#)

H1N1 Flu

For information about H1N1, visit
Fermilab's flu information [site](#).

Weather



Chance of
thunderstorms
90°/68°

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

From the CMS Center

Soccer and the LHC

Lothar Bauerdick, head of the CMS Center, wrote this week's column.

"Why are they still running like that?" my friend Claudio asked. It was Sunday night, and we were watching the World Cup soccer match between Germany and Australia. It was their first game of the tournament, and the German team was already 2-0 in the lead. So why did they still work so hard and run like crazy to shoot more goals?



Lothar Bauerdick

It made me think of the LHC. Since the 7-TeV startup in March, the LHC accelerator team has delivered lots of proton-proton collisions, especially on weekends when there are fewer accelerator studies that interrupt beam delivery. As a result, we have seen the CMS luminosity curve skyrocket exponentially. As we were scoring an ever-increasing amount of data, we cheered for the LHC team, hoping they'd run some more beam before focusing on more machine studies. We hoped to get at least one inverse picobarn of integrated luminosity before this summer's International Conference on High Energy Physics in Paris. Like the German team, which ended up winning 4-0 in a beautiful game, we hoped to achieve a high score in time for ICHEP to show our colleagues the best possible physics results.

But then the LHC had a few weekends with technical difficulties and less than great luminosity. Now the LHC team's plan is to concentrate first on developing full intensity with just one pair of proton bunches, and then later to go back to a larger number of bunches in the machine. The focus is to establish safe and routine operation, taking one step at a time. For the moment, this means rather little luminosity for the experiments while machine studies take precedence over physics running.

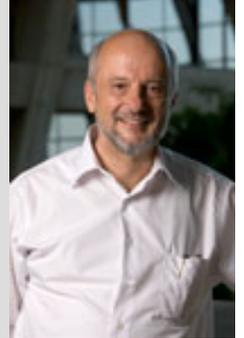
Concentrating on the long-term goals is not a bad thing at all, in physics and in soccer. Reaching those goals may require anticipating what's ahead in the next rounds and giving the team the best chance for long-term success. In the long run the CMS team will score a lot more luminosity. And the German soccer team hopefully will score more wins.

Special Announcement

Director's Corner

PAC

As we meet with the Program Advisory Committee in our yearly retreat to analyze and improve Fermilab's program, the first thing to celebrate is the continued remarkable performance of the Tevatron. Now with more than 2 inverse femtobarns for the year, we have broken the record for yearly accumulated luminosity. We have three weeks to go before the shutdown and hopefully another six weeks after the shutdown, so the record by the end of the fiscal year will be significantly higher than any previous record.



Fermilab Director Pier
Oddone

We have asked the PAC to comment on the value of continuing to run the Tevatron for an extended run of three years to improve the chances of discovery of the Higgs, anomalous CP violation and other topics beyond the Standard Model. Any decision to continue to run the Tevatron beyond its scheduled termination at the end of FY11 would affect how quickly we can develop our future programs. The threshold for changing our present plans is thus extraordinarily high and would involve many more players beyond Fermilab. That we are even discussing a possible running extension with the PAC is an homage to the folks who have produced such extraordinary performance out of the accelerator complex and tantalizing results from CDF and DZero.

There are many more topics we will be discussing with the PAC, including the difficult decision regarding beam configurations for the neutrino program, where we have an embarrassment of riches and conflicting demands from MINOS and Minerva. Our program as we move to the future is rich and complex. We are very fortunate to have the advice of the PAC, a committee composed of remarkably accomplished members from the national and international community who devote a great deal of time to helping achieve the best possible program at Fermilab.

Photo of the Day

[Secon Level 3](#)[Wilson Hall Cafe](#)

Wednesday, June 23

- Breakfast: English muffin sandwich
- Beef barley soup
- Gyros
- Caribbean grilled salmon
- Stuffed pepper
- Beef and cheddar panini
- Assorted sliced pizza
- Grilled chicken bowtie w/tomato cream

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

Wednesday, June 23

Lunch

- 40-clove garlic chicken
- Glazed baby carrots
- Lemon rice pilaf
- Banana cream puff w/bittersweet chocolate sauce

Thursday, June 24

Dinner

- Closed

[Chez Leon Menu](#)

Call x3524 to make your reservation.

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

DASTOW 2010 takes place Thursday



Children try their hands at firefighting during the 2009 DASTOW.

Don't forget that Thursday is Fermilab's bring your daughters and sons to work day. Enjoy a day of science shows, nature talks and metal crunching by the Fire Department.

A full schedule of events and rules can be found [here](#).

The purpose of the day is to expose your children to science and to the work you do.

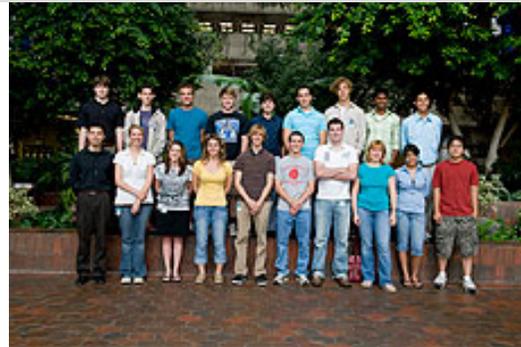
As you show your child or children around the laboratory, please keep a few things in mind. Employees must stay with their children at all times. When near offices, remember that other employees will be working nearby, so please keep noise and conversations to a minimum. Also, because parking is limited, a bus will be provided for Fire Department and bison farm activities. You must take the bus to attend these events.

There also have been problems in the past with individuals allowing children to wander around by themselves, particularly at the bison farm. Roads & Grounds personnel have agreed to keep the bison in the feeding pen off of Batavia Road so that you can get an up-close view. If children run around the barn or in the corral area, Roads and Grounds staff will not allow up-close viewing again and next year's DASTOW would have viewing from the Industrial Building complex parking lot.

Please come and enjoy the day with your child. Just remember to be respectful to laboratory property and coworkers.

[In the News](#)

New employees - June 14



Front row from left - Tao Long, Jeanine Gasper, Melissa Winchell, Jackie Iacovelli, Jeff Liecht, Alex Sulek, Kyle Becker, Olga Terlyga, Sharada Dharmasankar and Andrew Lee. Second row from left: Hunter Briesel, Jamie Ray, Tom Galloway, Kyle Harmon, Luis Abrego, Richard Garcia, Jake Prebys, Sid Narayanan and Andy Nian.

[Safety Update](#)

ES&H weekly report, June 22

This week's safety report, compiled by the Fermilab ES&H section, includes one first aid-only injury. Find the full report [here](#).

[Safety report archive](#)

[Announcements](#)

Latest Announcements

[10,000 Steps-a-Day winner announced](#)

[Submit timecard on new system by Friday, June 25](#)

[Oracle E Business Suite and ProCard application systems downtime on Friday, June 25 from 8 - 9 p.m.](#)

[Nominations requested for employee profiles](#)

[Day Camp payments due](#)

[Time to complete accomplishment reports](#)

[Web of Science citation database online trial](#)

[Deadline for The University of Chicago Tuition Remission Program - June 25](#)

[Adult water aerobics - Mondays](#)

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Sterile neutrino back from the dead

From *New Scientist*, June 22, 2010

A ghostly particle given up for dead is showing signs of life.

Not only could this "sterile" neutrino be the stuff of dark matter, thought to make up the bulk of our universe, it might also help to explain how an excess of matter over antimatter arose in our universe.

Neutrinos are subatomic particles that rarely interact with ordinary matter. They are known to come in three flavours – electron, muon and tau – with each able to spontaneously transform into another.

In the 1990s, results from the Liquid Scintillator Neutrino Detector (LSND) at the Los Alamos National Laboratory in New Mexico suggested there might be a fourth flavour: a "sterile" neutrino that is even less inclined to interact with ordinary matter than the others.

[Read more](#)

[Adult swim lessons - Mondays](#)

[Argentine Tango, Wednesdays through June 30](#)

[Lecture series: Intermediate/Advanced Topics in C++ Programming](#)

[Ask HR: 15th floor visits Wilson Hall Atrium on Friday, June 25](#)

[Ask HR: 15th floor visits TD - ICB Tuesday, June 29](#)

[Free Webinar on "Retirement Planning for Women," June 30](#)

[10,000 Steps-a-Day Walking program](#)

[Fermilab Arts Series presents Corky Siegel and Chamber Blues - June 26](#)

[Sign up for summer Science Adventures classes](#)

[Introduction to LabVIEW course - July 13](#)

[Embedded Design with LabVIEW FPGA and CompactRIO seminar - July 13](#)

[Interaction Management Coaching Forum - July 27](#)

[Get to know great inventors in Inventor's Workbench, a Science Adventure](#)

[Submit an announcement](#)