

Calendar

[Have a safe day!](#)

Wednesday, Sept. 8

3:30 p.m.

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

THERE WILL BE NO FERMILAB
COLLOQUIUM THIS WEEK

Thursday, Sept. 9

2:30 p.m.

[Theoretical Physics Seminar](#) - Curia II

Speaker: Matthew Buckley, Fermilab
Title: A New Way to Measure Spin

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



Sunny
71°/48°

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

[Secon Level 3](#)

Feature

Robert Wilson's niece visits her uncle's legacy



Carl and Susan Bellone visited Fermilab last week. Susan is the niece of Robert Wilson, Fermilab's founding director.

Many knew Fermilab's founding director as "Dr. Wilson" or "Robert" or "Bob." But to a recent visitor, Wilson went by the name "Uncle Bobby."

Susan Bellone, Wilson's niece, came to visit the laboratory for the first time on Thursday, Sept. 2. Bellone recently retired from her career as an elementary school teacher and teacher trainer in California. Roads & Grounds' Bob Lootens and Fermilab historian Adrienne Kolb led Bellone and her husband, Carl, on a tour of the site.

"It's much bigger than I thought," she said as she first walked into the atrium of Wilson Hall, which her uncle helped to design.

When Wilson established Fermilab, then known as National Accelerator Laboratory, he put a great deal of effort into creating a unique look and feel for the laboratory. He and a designer friend came up with the blue and orange color scheme to which Fermilab publications still adhere. He created many of the sculptures on site. And he helped to design the buildings and grounds, down to the slope of the roof of the education center and the curve of the road that leads to it. He wanted to create structures harmonious with the surrounding landscape, Bellone said.

Art was an integral part of Wilson's life, she said.

"He said that when he would work on a drawing or

From the Accelerator Physics Center

A MAP for the future

Vladimir Shiltsev, director of the Accelerator Physics Center, wrote this week's column.



Vladimir Shiltsev

Wouldn't it be nice to be able to build the next cutting-edge particle collider on the Fermilab site? A group of scientists is building the case for a revolutionary machine that would fit on site and propel Fermilab back to the Energy Frontier.

The design of next-generation electron or proton colliders calls for a machine made up of 20, 40 or even 140 miles of tunnels, magnets and beamlines--too large to fit on our site. But there is another concept: a muon collider. The idea is simple: send protons (from a high-intensity proton source such as Project X) into a liquid-mercury target; collect the emerging muons and accelerate them to 1 or 2 TeV using, for example, the superconducting radio frequency cryomodules developed for the proposed International Linear Collider; then collide the muons in a deep underground ring of the size the Tevatron (see graphic below).

Why can a muon collider fit on the Fermilab site but other colliders cannot? Muons are heavier brothers of electrons and have the advantage that they do not lose energy when you steer them through a compact accelerator ring. But this advantage comes at a price: Muons are short-lived and decay in about 20 thousandth of a second when traveling at very high energies. The challenge is to quickly accelerate muons and send them around a collider ring a few thousand times before they disappear.

For more than a decade an international team of accelerator builders and particle physicists has advanced the concept of a muon collider. Earlier this year, the muon collider team, led by Fermilab, submitted a plan to the U.S. Department of Energy. The plan is known by the intriguing acronym MAP, which stands for a national [Muon Accelerator Program](#). The program calls for an extensive accelerator R&D program with the goal of understanding the feasibility, the potential energy reach and luminosity (the number of collisions per second) of a muon collider by 2016. More than 30 scientists, engineers and technicians from Fermilab, together with colleagues from other national laboratories, universities, research companies and international partners will take

Wilson Hall Cafe
Wednesday, Sept. 8
 - 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, Sept. 8
Lunch
 - Sesame chile chicken w/ gingered watermelon salsa
 - Basmati rice
 - Coconut flan

Thursday, Sept. 9
Dinner
 - Gourmet greens, pear & parmesan salad
 - Beef Wellington
 - Whipped potatoes
 - Green beans
 - Chocolate soufflé w/ crème Anglaise

[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](#)

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Info

sculpture, he'd get very engrossed in that," Bellone said.

"But then the solution to a physics problem would come to him. And when he was working on science, he would see the art in it. He felt there was a close connection."

Bellone enjoyed seeing the physical evidence of Wilson's influence at the laboratory. She also enjoyed hearing stories from the employees who knew him.

"It was nice seeing that my uncle is still remembered," she said.

-- *Kathryn Grim*

Photo of the Day

Taking flight



PPD's Leticia Shaddix submitted this image of an egret taking flight from the pond west of Wilson Hall.

In the News

In Europe, science collides with the bottom line

From *Washington Post*, Sept. 7, 2010

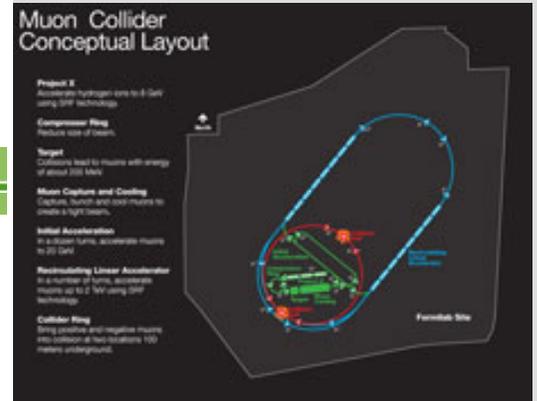
In Meyrin, Switzerland using a machine kept colder than space, scientists at the world's most ambitious international research facility are puzzling out the questions of the universe, working to re-create the cosmic soup served up by the Big Bang. But the famous institute is also facing a far more earthly conundrum: how to pay the bills.

An era of fiscal austerity is sweeping over Europe, with governments moving to slash record budget deficits and avoid a Greek-like debt crisis by cutting everything from aid for single mothers to once-sacred state jobs.

Under mounting political pressure, some countries are now balking at the mega-price tags of lofty regional cooperation projects such as the European Organization for Nuclear Research (CERN), home to the "Big Bang

part in the program.

The MAP proposal was reviewed two weeks ago by the DOE Office of High Energy Physics. We received good advice and recommendations, with the overall conclusion that the program has merit and should go forward. We look forward to unfolding the MAP and finding out whether a muon collider could be Fermilab's ticket back to the Energy Frontier.



Safety Update

ES&H weekly report, Sept. 7

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

[Safety report archive](#)

Accelerator Update

Sept. 3-6

- Four stores provided ~47.25 hours of luminosity
- TeV vacuum leak repaired
- Linac personnel repaired LRF1
- RF personnel repaired MRF6
- BRFF6 yard breaker tripped

The integrated luminosity for the period from 8/30/10 to 9/6/10 was 37.14 inverse picobarns. NuMI reported receiving 6.52E¹⁸ protons on target during this same period.

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

Announcements

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Machine" that sprawls for miles across this complex straddling the picturesque border of Switzerland and France.

Under orders from European governments to cut costs, CERN officials say, the institute is planning to mothball all nine particle accelerators at the facility beginning in 2012 - saving \$25 million on electricity alone. The move will mean a critical period of lost opportunities for visiting research fellows and a year without fresh data for projects, including one on the cusp of trapping an atom of antimatter to better understand the early formation of the universe.

"It will now take a little longer to answer some of these questions," said Rolf-Dieter Heuer, CERN's director general.

[Read more](#)

Latest Announcements

[Fermilab International Folk Dancing resumes at the Barn Thursdays from Sept. 9](#)

[Argentine Tango, Wednesdays through Sept. 29](#)

[Heartland blood drive total was 90 lifesaving units of blood](#)

[Chicago Blackhawks pre-season discount tickets](#)

[Reduced parking behind Ramsey Auditorium - Sept. 7-17](#)

[Junior Prairie Rangers - Sept. 18](#)

[Workshop on Accelerator-Driven Sub-Critical Systems & Thorium Utilization](#)

[Sign up for fall Science Adventures](#)

[Looking for league bowlers](#)

[Regal Movie Theater discount tickets](#)

[Fermilab Lecture Series Presents A Croc Odyssey: Speedy Gallopers with a Taste for Dinosaur](#)

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

[Family Science Time - Saturday, Sept. 25](#)

[Submit an announcement](#)