

Calendar

[Have a safe day!](#)

Tuesday, June 2

Noon

Summer Lecture Series - Curia II

Speaker: Pier Oddone, Fermilab

Title: Future of Fermilab
THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

Wednesday, June 3

8 a.m.

[Users' Annual Meeting](#)

[Registration](#) - Auditorium Lobby

9 a.m.

[Users' Annual Meeting](#) -

Auditorium

3:30 p.m.

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

THERE WILL BE NO FERMILAB COLLOQUIUM TODAY

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

Weather



Thunderstorms
69°/50°

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

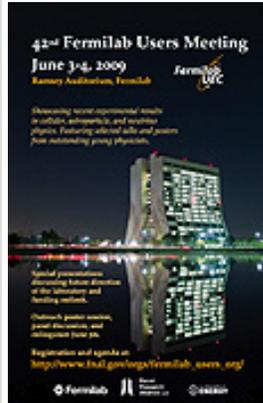
Current Security Status

[Secon Level 3](#)

Wilson Hall Cafe

Special Announcement

Annual Users' Meeting begins tomorrow, register now



The annual Fermilab Users' Meeting, begins at 9 a.m. tomorrow. Physics results! Awards! Posters! Public lecture! The future! [And more...](#)

[Register](#) for the meeting.

Feature

USPAS students win poster contest at PAC09



Four U.S. Particle Accelerator School students received poster awards at the 2009 Particle Accelerator Conference. Anna Grasselino (left), Evelyne Meier and Satomi Shiraishi stand with Stan Schriber, who presented the awards. Grasselino received first place, Meier second and Shiraishi third. Fourth place winner Roark Marsh is not pictured.

To understand the value of the U.S. Particle Accelerator School based at Fermilab and the quality of students it attracts, all you have to do is look at [2009 Particle Accelerator Conference](#).

The [top four awards](#) out of 1,625 exhibits in the student poster contest went to USPAS students at the May conference in Vancouver.

A team of judges ranked the posters using a variety of criteria including originality, technical excellence, and graphical and aesthetic presentation.

Director's Corner

Global vision

Editor's note: CERN Director General Rolf Heuer wrote today's Director's Corner, the first of an occasional series of exchanges. Fermilab Director Pier Oddone's usual Tuesday Corner will appear in Friday's CERN Bulletin. Fermilab Today will provide a link.



Rolf Heuer

Globalization is part of the early 21st century zeitgeist, but for particle physics it's nothing new. Our field has always worked globally. When CERN was established in the 1950s, Fermilab did not yet exist. Brookhaven was CERN's natural American partner and competitor. Competition was fierce, though not in the traditional sense of the word. Then as now, our objectives were shared and although each lab wanted to be first, the overriding goal was generating knowledge and innovation for the common good. Back then, when Brookhaven scientists developed the technique of strong focussing, their instinct was to share it with CERN. The result was that our 10 GeV proton synchrotron became a 25 GeV machine that started up 50 years ago, and Brookhaven even helped us commission it. Today's equivalent is manifest in the unprecedented level of support that CERN is receiving from other labs, notably Fermilab, in preparing the LHC for a restart later this year. Yes we're in competition, but it's a healthy competition that benefits us all – regardless of where the discoveries and technological advances are made.

Particle physics has been a global field for longer than our two laboratories have existed, and up to now there has been an equitable exchange of scientists between the major particle physics regions: the Americas, Asia and Europe. Particle physicists from around the world have always been welcome at any laboratory with the infrastructure for their research. With the LHC, however, our field has reached a turning point. Just as before, CERN maintains an open door policy and we have over 100 nationalities in our user community. What's changed, however, is the flow of scientists. Although originally a

Tuesday, June 2

- Golden broccoli & cheese
- Southern style fish sandwich
- Coconut crusted tilapia
- Chicken w/arthichokes and mushrooms
- La grande sandwich
- Assorted sliced pizza
- Chicken fajitas

[Wilson Hall Cafe Menu](#)

Chez Leon

Wednesday, June 3

Lunch

- Spicy sausage & cheese calzone
- Cabbage & mixed green salad w/ tangy herb vinaigrette
- Chocolate chiffon cake

Thursday, June 4

Dinner

- Spinach phyllo roll-ups
- Grilled swordfish
- Ginger sesame jasmine rice
- Steamed asparagus
- Orange cream cheesecake

[Chez Leon Menu](#)

Call x3524 to make your reservation.

Archives

[Fermilab Today](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[ILC NewsLine](#)

Info

Fermilab Today

is online at:

www.fnal.gov/today/

Send comments and suggestions to:

today@fnal.gov

Visit the Fermilab

[home page](#)

Since 1981, the [USPAS](#) has been involving students in accelerator beam research and design work and its associated technologies. Few schools offer such classes. The two-week course attracts graduate and undergraduate students as well as career professionals seeking to stay up to date on the latest cutting-edge technology.

"I am very proud of their achievements and happy that the USPAS has played a role in their education in accelerator physics," said Bill Barletta, USPAS director.

The winners are:

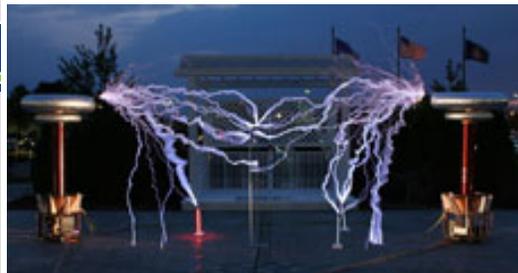
- Anna Grassellino, University of Pennsylvania: "Medium Field Q-Slope Studies in Superconducting Cavities"
- Evelyne Meier, Monash University: "Electron Beam Energy Stabilization Using a Neural Network Hybrid Controller at the Australian Synchrotron Linac"
- Satomi Shiraishi, University of Chicago: "Diffusion Rate in Tevatron Using Flying Wire"
- Roark Marsh, Massachusetts Institute of Technology: "X-Band Photonic Bandgap (PBG) Structure Breakdown Experiment"

The USPAS is a 12-member consortium comprising seven national laboratories of the Office of Science of the Department of Energy, two national laboratories of DOE's National Nuclear Security Agency, two National Science Foundation university laboratories, and one office of the Department of Homeland Security.

-- Tona Kunz

Special Announcement

Users' Meeting offers a taste of the unusual



Jeff Larson will conduct a Tesla coil demonstration Wednesday at 9:30 p.m.

Lightning synchronized to music will help conclude day one of the [Users' Meeting](#) and launch the [Users' Outreach Workshop](#) thanks

European project, the LHC is becoming the global focus for particle physics, and it is safe to assume that future projects of a similar scale will be conceived as global from the start.

Much has been made of the CERN Council working group on geographical and scientific enlargement of CERN. This is, in my opinion, a necessary step for Europe to redefine its role on the global stage. Among the subjects being considered by the group is the current membership structure of CERN, offering differing conditions for Members, Observers and countries with collaboration agreements. In today's world, is this still an appropriate structure? Probably not. The group will also pave the way for CERN to play the role it was created for – coordinating fundamental physics research in Europe, and representing Europe on the world stage.

The time is right for the particle physics community and its funding agencies to develop a truly global vision of the field. Some projects can be hosted by national labs and others by regional facilities. Some will be global from the outset. Whatever the scale, we must ensure that all the research we do is world-class, and that all our facilities are open to the free flow of scientists. We should ensure that where the science is worth doing, it is done, while being careful to use resources responsibly without duplication of effort.

The future of particle physics will be healthiest if there are strong national, regional and global projects, all coordinated on a global scale. The CERN Council working group is an important step in that direction. Today, globalization is a fact of life, and the particle physics community has the opportunity to show the way to better optimization of global resources.

Have a question for the CERN DG? Submit it [here](#).

Accelerator Update

to senior technician Jeff Larson's twin Tesla coils. At more than seven feet tall and capable of emitting more than 12 feet of sparks, the twin coils are sure to light up the Village at 9:30 p.m. June 3 in the parking lot of Lab 3.

Together, the [musical Tesla coils](#) can play everything from the theme to the Mario Brothers video game to the "Dance of the Sugar Plum Fairy."

The music is created when a laptop computer signals the coil to produce a spark, which heats the air making a popping noise. Sparks emitted in rapid succession create a buzz and eventually a musical note. Larson will control the frequency of the sparks to create whole songs.

The electric show follows the 8 p.m. [public lecture](#) in Ramsey Auditorium that explains other, more contemporary uses for plasma. Tom Katsouleas, professor and dean, at Duke University's Pratt School of Engineering, will discuss the future of plasma wakefield accelerators and their industrial applications.

The Users' Meeting begins tomorrow at 9 a.m. This year's annual Users' Meeting will feature recent experiment results, the laboratory's future plans and physics updates from Washington D.C. and around the world. This year's highlights include lectures by: Department of Energy's Mike Procaro, National Science Foundation's Jim Reidy, HEPAP's Mel Shochet, CERN's Sergio Bertolucci, KEK's Koichiro Nishikawa, and Fermilab's Director Pier Oddone.

Users' festivities will continue into Thursday with the Wonders of Physics demonstration during lunchtime in the cafeteria.

In the News

Dark-energy particle spotted?

From *Nature*, May 29, 2009

Reported 'chameleon' particle would change its mass to match its environs.

Cosmologists don't usually take their lead from the animal kingdom. But a model that postulates the existence of a 'chameleon' particle — which would change its mass depending on its surroundings — is gaining attention.

A new paper claims to have spotted signs of this elusive particle, whose existence was first

May 29 - June 1

- Four stores provided ~37.5 hours of luminosity
- H- Source problems fixed
- Store 7097 quenched at B0
- TeV suffered a D0 quench with no beam
- TeV C4 wet engine valve replaced

*The integrated luminosity for the period from 5/25/09 to 6/1/09 was 51.59 inverse pico barns

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

Announcements

Latest Announcements

[Winners of the Asian/Pacific quiz contest](#)

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

[International Folk Dancing canceled June 4, resumes at auditorium June 11](#)

[English Country Dancing, June 21](#)

[Costco Warehouse Club memberships](#)

[New URA e-mail address](#)

[Computing account requests reach peak season](#)

[Argentine Tango classes through June 24](#)

[Summer co-ed volleyball league June 1](#)

[Registration for Users' Meeting is open](#)

[Conflict Management and Negotiation Skills class - June 3 and 10](#)

[Discount tickets to "1964"...Beatles tribute - June 6](#)

[Accelerated C++ Short Course: registration open - June 8](#)

[Python Training June 17-19](#)

postulated in 2003 to explain the accelerating expansion of the Universe, which has been attributed to some unknown 'dark energy'. The changing mass of a chameleon particle would modify the range at which its force can act, thus possibly explaining why whatever causes the Universe's acceleration hasn't been detected on Earth. On Earth, the chameleon would be too heavy to create any noticeable force, but in the tracts of empty space, its effect would be huge.

[Read more](#)

[Susan Werner - Singer/Songwriter Performs on Arts Series](#)

[Microsoft Office 2007 help at the Library](#)

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

[Nanotechnology lecture: Crafting of Self-Assembling Materials for Medicine & Energy - Fermilab Arts Series](#)

[Science Adventures for children](#)

[Discounted rates at Grand Geneva Resort, Lake Geneva, WI](#)

[SciTech summer camps](#)

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

[Additional Activities](#)

[Submit an announcement](#)