

## Calendar

Tuesday, Oct. 14  
3:30 p.m.  
DIRECTOR'S COFFEE  
BREAK - 2nd Flr X-Over  
THERE WILL BE NO  
ACCELERATOR PHYSICS  
AND TECHNOLOGY  
SEMINAR TODAY  
4 p.m.  
[Budker Seminar](#) - One North  
Speaker: Daniel McCarron,  
Illinois Institute of Technology  
Title: Intensity-Dependent  
Beam Dynamics Studies in the  
FNAL Booster

Wednesday, Oct. 15  
3:30 p.m.  
DIRECTOR'S COFFEE  
BREAK - 2nd Flr X-Over  
4 p.m.  
[Fermilab Colloquium](#) - One  
West  
Speaker: Robert Garisto,  
Physical Review Letters  
Title: Half a Century of  
Physical Review Letters

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

## Weather

 Mostly cloudy  
67°/51°

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

## Current Security Status

[Secon Level 3](#)

## Wilson Hall Cafe

## Feature

### Fermilab scientists, collaborators win APS prizes



The American Physical Society has bestowed some of the physics community's most prestigious awards on Fermilab scientists and collaborators. The awards are given for outstanding scientific, education and public service achievements.

This year, the APS awarded the 2009 W.K.H. Panofsky Prize in Experimental Particle Physics to CDF collaborators Luciano Ristori and Aldo Menzione; the 2009 Edward A. Bouchet Award to DZero physicist Gaston R. Gutierrez; and the 2009 J. J. Sakurai Prize for Theoretical Particle Physics to theoretical physicists Keith Ellis, Davison Sopes and John Collins. Also, Brookhaven National Laboratory scientist Saoshi Ozaki was awarded the Robert R. Wilson Prize for Achievement in the Physics of Particle Accelerators. The prize is named after Fermilab's founding director.

"It is wonderful that Fermilab staff and collaborators are being honored by these great awards," said Fermilab Director Pier Oddone.

The award recipients, their contributions and prizes are described in separate stories available via the links below.

[W.K.H. Panofsky Prize in Experimental Particle Physics](#) - Luciano Ristori and Aldo Menzione

[Edward A. Bouchet Award](#) -- Gaston R. Gutierrez

[J. J. Sakurai Prize for Theoretical Particle Physics](#) - Keith Ellis, Davison Sopes and John Collins

[Robert R. Wilson Prize for Achievement in the Physics of Particle Accelerators](#) - Satoshi Ozaki

## In the News

## Director's Corner

### Heat and light

Last Sunday I was fortunate to attend a symposium on *The Nuclear Future* in which the recipients of the Rumford Prize of the American Academy of Arts and Sciences discussed the nearly intractable issues associated with the control of nuclear weapons as we move towards an era in which nuclear energy and technology will be far more prevalent throughout the world. I say "fortunate" because it was an occasion to celebrate a distinguished scientist and four statesmen who have contributed greatly to arms control.



Pier Oddone

The Rumford Prize is one of the oldest scientific prizes in the United States. The prize recognizes contributions to the fields of "heat and light," broadly interpreted. In this case, it extended to the control of the greatest source of heat and light created by humans and capable of destroying them. The endowment was founded by a bequest to the Academy from Benjamin Thompson, Count Rumford, in 1796. The prize is awarded only every few years.

This year's award recognized five remarkable Americans who have made contributions to arms control throughout the turbulent era from the cold war through the transition to a multi-polar world. Sid Drell, Henry Kissinger, Sam Nunn, William Perry and George P. Schultz, each in his own sphere, have worked and continue to work towards the control and elimination of nuclear weapons. They are now working together, making a sharp call to all of us to pay attention, get our heads out of the sand and contribute to the huge international effort necessary to control and someday eliminate nuclear weapons. The danger today of a rogue state or group acquiring and using a nuclear weapon, perhaps one that would be used on a world metropolis and that would not carry a return address, has a way of focusing the mind.

What is remarkable is that these leaders have

Tuesday, Oct. 14

- Golden broccoli & cheese
- Southern style fish sandwich
- Coconut crusted tilapia
- Smart cuisine: spaghetti w/ turkey meat sauce
- La Grande sandwich
- Assorted slice pizza
- Chicken fajitas

[Wilson Hall Cafe Menu](#)

**Chez Leon**

Wednesday, Oct. 15

Lunch

- Beef bourguignon
- Parsley buttered egg noodles
- Apple walnut cake w/cream chantilly

Thursday, Oct. 16

Dinner

- Roasted red pepper & portabella mushroom Salad
- Surf & turf
- Potato cups
- Brussels sprouts
- Lemon Napoleons

[Chez Leon Menu](#)

Call x4598 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/](http://www.fnal.gov/today/)

Send comments and suggestions to:

[today@fnal.gov](mailto:today@fnal.gov)

## Pima County officials hope flawed ballot is one of a kind

From *Tucson Citizen*, Oct. 11, 2008

Officials in the Pima County Recorder's Office are hoping the early ballot mailed to voter Roy Thatcher for the Nov. 4 general election is one of a kind.

Thatcher called the Tucson Citizen on Friday to report that only one side of his early ballot contained print.

"It's completely blank on the back side," said Thatcher, a 69-year-old retired Fermi National Accelerator Laboratory engineer. "The thing that struck me is how easy it would be for someone to just fill out the front side, turn it over, and think 'I'm done,' " Thatcher said.

The other side of the ballot lists the propositions and retention vote on Pima County Superior Court judges. Pima County Registrar of Voters Chris Roads said Friday that Thatcher's call to the office is the only one staffers have received with such a problem.

"I would imagine it is just this one," Roads said.

"We have over 190,000 in the mail. If there were additional problems, we would have heard about it," he said.

[Read more](#)

**In the News**

## Fuzziness on the road to physics' grand unification theory

From *EurekaAlert*, Oct. 6, 2008

University of Oregon theoretical physicists suggest a layer of particles may exist and block a merger.

Leave it to hypothesized gravity to weigh down what physicists have thought for 30 years. If theoretical physicists, led by the University of Oregon's Stephen Hsu, are right, the idea that nature's forces merge under grand unification has grown fuzzy.

At issue are grand unified theories that first appeared in the 1970s. They have suggested that, at short distances or high-energy scales, electromagnetic forces, strong forces, which bind quarks in protons and neutrons, and weak forces, which drive nuclear decay, will coalesce into a single unified field. Indications of this idea could appear at the Large Hadron

come together with a joint call and a roadmap, first in January of 2007 and more recently in [January of 2008](#) that has found support in a broad community of scientists, policymakers and the public. This is a very hopeful sign that progress in this area, now at a standstill, can be once again a central concern for all of us, and especially our elected representatives. We, the members of the science and technology community, should not be just bystanders in this endeavor. This distinguished group emphasized that those of us with technical skills are needed to help the government agencies in the vast international effort that will be necessary to progress toward a world secure from nuclear weapons.

**Accelerator Update**

Oct. 10-13

- Two stores provided 12.5 hours of luminosity
- Shutdown ends and startup begins
- Pelletron problems continue
- Lithium Lens trip

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

**Announcements**

[Have a safe day!](#)

Diversity Fair Oct. 17

Fermilab's Diversity Council and the Planning Group for Multicultural Events subcommittee hosts the inaugural Diversity Fair from 11 a.m. to 2 p.m. Friday, Oct. 17. More than a dozen cultural exhibits and international foods will be on display and for sampling in the Wilson Hall atrium. Cultural performances, including traditional dance and song, will occur in the lunchroom and Ramsey Auditorium. To learn more about the Diversity Council, visit the [Web site](#).

Photos wanted for labwide party  
At the labwide party on Oct. 17, a slideshow on the video screen in the atrium will show images of people at Fermilab. We are looking for additional photos of you and your colleagues here at work--in your office or work area, at a department picnic, during lunch in the cafeteria, etc. Please e-mail your jpeg files to [lwp08@fnal.gov](mailto:lwp08@fnal.gov) by Friday, Oct. 10.

Depending on the number of photos we will receive, we might not be able to include every photo in the slideshow.

"The Atom Smashers", panel

## Collider (LHC).

Hsu and colleagues applied advanced computations to qualities that might exist in quantum gravity in distance-shortened, high-energy interactions. Working with Hsu on the project, to be described in the journal *Physical Review Letters*, were UO doctoral student David Reeb and Xavier Calmet, a former postdoc in the UO's Institute of Theoretical Science and now of the Center for Particle Physics and Phenomenology at Catholic University of Louvain in Belgium.

"The energy scale at which these three forces become equivalent is probably very high," Hsu said. "We do not have a direct way to probe what happens. We cannot actually produce the energies or produce the particles necessary to directly test whether unification occurs, so we look for hints at lower energy scales -- and look at how the interactions change. We have seen indications that these three interactions are starting to unify. If you extrapolate these trends to very high energy, it looks like, in certain models or theories, they could unify -- all based on experimental data. If grand unification exists, it might be shown at the LHC."

[Read more](#)

discussion at Fermilab  
Fermilab will show the 78-minute directors' cut of the PBS documentary "[The Atom Smashers](#)," which looks at the race for discovery between Fermilab and CERN. The event includes a panel discussion with scientists featured in the film, including Nobel Laureate Leon Lederman. Saturday, October 18, at 7 p.m., in Fermilab's Ramsey Auditorium. Tickets are \$5. For tickets, call (630) 840-2787.

George Winston piano concert coming Oct. 19  
The Fermilab Arts Series presents George Winston at 3 p.m. Sunday, Oct. 19, in Ramsey Auditorium. Winston's solo piano concert features music from his melodic seasonal recordings, Vince Guaraldi's Peanuts pieces, New Orleans R & B piano, stride piano, and more, including pieces from his latest CD, "Gulf Coast Blues and Impressions: A Hurricane Relief Benefit." Tickets are \$25 for adults and \$13 for those 18 and younger. For reservations, call (630) 840-2787 weekdays from 9 a.m. to 4 p.m. For more information, see [www.fnal.gov/culture](http://www.fnal.gov/culture).

NALWO Halloween playgroup Oct. 25  
Fermilab's women's organization NALWO sponsors a children's playgroup Halloween event at 4:30 p.m. Saturday, Oct. 25, in Kuhn Barn. The event is open to all Fermilab families. Wear a costume for the Halloween parade and join in face painting, a pumpkin relay, trick or treating and more. Rsvp by Oct. 19 to Maria at (630) 840-4246 or [mariasungwon@yahoo.com](mailto:mariasungwon@yahoo.com) Please bring a dish or desert to share.

Learn about disability workplace inclusion  
October is National Disability Employment Awareness Month (NDEAM). Although this October marks the 61st year that our country has celebrated employment opportunities for people with disabilities, it was not until Feb. 1, 2001, when President George W. Bush announced his disability agenda, the New Freedom Initiative, that a President focused on full inclusion of people with disabilities in all aspects of society, including the workplace. [Click here](#) to learn more about inclusive workplaces.

[Additional Activities](#)

