

## Calendar

### Tue., January 16

**1:00 p.m.** Particle

Astrophysics Seminar - The Dark Side (WH-6W) (NOTE TIME, DATE and LOCATION)  
Speaker: H. Trac, Princeton University

Title: Radiative Transfer Simulations of Cosmic Reionization

**3:30 p.m.** Director's Coffee Break - 2nd floor crossover

**4:00 p.m.** Accelerator Physics and Technology Seminar - 1 West

Speaker: D. Mihalcea, Fermilab  
Title: Longitudinal Electron Bunch Diagnostics Using Coherent Transition Radiation

### Wed., January 17

**3:30 p.m.** Director's Coffee Break - 2nd Floor Crossover

**4:00 p.m.** Fermilab Colloquium - 1 West

Speaker: S. Nagel, University of Chicago

Title: Singularities and Topological Phase Transitions in Fluids: Breaking Away, Selective Withdrawal and Islets in the Stream

**THERE WILL BE NO FERMILAB ILC R&D MEETING THIS WEEK**

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

## Weather



**Sunny 20°/1°**

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

## Current Security Status

[Secon Level 3](#)

## Wilson Hall Cafe

## Feature

### Preserving the pi poles



[Fermilab and the city of Batavia are working together to save the pi poles. The Batavia City Council approved an agreement in late November.](#)

Of the many reminders of Robert Wilson's legacy that riddle the Fermilab grounds, perhaps the most remarkable is the line of wooden power poles stretching north from Wilson Hall. The poles carry 345,000V of electricity and provide 98 percent of the site's power. They stand over 95 feet high, sink 12 feet into the ground and stretch for over 2 miles. And, of course, they look like the Greek letter pi.

But since their construction over 30 years ago, the Douglas fir poles have given FES more problems than satisfaction. Joe Pathiyil of FES remembers boron treatments and steel reinforcements to battle moisture, epoxy and steel mesh to fight woodpecker holes, and four pole replacements, all to little avail. A complete replacement looked likely, but there was one problem: funding. Replacing the poles would cost over \$1.2 million.

## Director's Corner

### The Monday Class

Yesterday I had the pleasure of speaking to "The Monday Class," an organization of distinguished Chicago women who meet at the Casino Club every Monday from October to May to hear speakers and engage in discussions on a broad set of subjects



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ranging from the arts and sciences to history and policy issues. The Monday Class is a venerable Chicago institution; it has conducted meetings for more than seven decades, engaging intellectually the issues of the day.

My talk was an introduction to particle physics and to Fermilab. Our laboratory has been in the news lately on a variety of fronts, especially with the new connection to the University of Chicago, the remarkable results coming out of the Tevatron, the effort to host the ILC here, and the financial difficulties created by Congress's continuing resolution on the federal budget.

I was struck by the excitement the audience showed for what we do. In particle physics we deal with profound mysteries that engage the public. We develop remarkable tools and we make progress answering the extraordinary questions we pose. When we explain ourselves in plain English to our fellow citizens the enthusiasm and support that follows is heart-warming. Speaking to a group like the "The Monday Class" is very special. Highly intelligent but not familiar with particle physics or accelerators, they stay engaged and ask difficult, profound and downright fun questions.

As we deal with the current financial difficulties, the many technical issues that confront us in the ongoing program and the uncertainty in the capture plans for the ILC, it is easy to lose sight of the big picture. Explaining ourselves to our fellow citizens takes us back to the basics and can be a remarkable tonic. I recommend it.

## Accelerator Update

**Tuesday, January 16**

Not Available

[Wilson Hall Cafe Menu](#)**Chez Leon****Wednesday, January 17****Lunch**Mid-January Winter Blues  
Dessert Luncheon**Thursday, January 18****Dinner**Steamed Mussels in White  
Wine and Thyme  
Marinated Leg of Lamb  
Ratatouille  
Pear and Cranberry Strudel[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)

Meanwhile, the city of Batavia was also having troubles. The city needed to run 138,000V of power to the east side of the city, but there was one problem: Fermilab. Circumventing the federally-owned site was financially impractical. After a series of talks, however, the DOE granted Batavia an easement to set up two power substations and their interconnecting power lines on Fermilab grounds. In return, the city will fully replace the aging pi-poles.

"The poles will be built specifically to look identical to the existing structures," said Randy Wielgos, assistant superintendent of the Electric Department for the City of Batavia. The 19 total structures will require 582,000 pounds of painted steel and will be imported from PennSummit Tubular in Pennsylvania for installation during the accelerator shutdown this summer, Wielgos said.

An additional benefit of this agreement is the installation of two large on-site circuit breakers, also by Batavia, that will allow Fermilab to cut off power for maintenance with the flip of a switch and conduct site operations with much more flexibility. Currently ComEd/PJM requires up to 90 days notice for a power shutdown of their grid, according to Steve Krstulovich of FES. "That'll save a lot of time and energy," he said. "It's a win-win. Batavia wins, and we win."

--Christine Buckley

**In the News*****New York Times*  
January 14, 2007:****Where Protons Will Play**

On seeing the Alps for the first time, Dorothy Parker is reputed to have said, "They're beautiful, but they're dumb." Near the foot of Mont Blanc, the greatest of the Alpine peaks, another sizable object is taking shape, also quite beautiful in its way, yet not at all dumb. In fact, its pristine geometries may be instrumental in revealing what have hitherto been some of nature's deepest secrets....

[Read More](#)**In the News****January 10 - 12**

- Two stores provided 41 hours and 20 minutes of luminosity
- MI SA power supply current monitor failing
- TeV develops LCW leak
- Meson to take beam to MO1 this weekend

[Read the Current Accelerator Update](#)[Read the Early Bird Report](#)[View the Tevatron Luminosity Charts](#)**Special Announcement****Interactions.org now offers  
weekly newsletter**

[Interactions.org](http://Interactions.org) offers a daily smorgasbord of particle physics news. The site also is a central resource for communicators of particle physics, offering information, images and links from the world of particle physics.

Interactions.org is now offering a newsletter called "A Week of Interactions," a weekly compilation of all the news articles, press releases, images and features added to Interactions.org in the previous week. Subscription to the electronic newsletter is free of charge. Sign up [here](#) to receive your weekly compilation of particle physics news.

**Announcements****GSA Winter Ball**

The Graduate Student Associate will host a Winter Ball on Friday, January 19, from 8 p.m. to midnight at Ida Noyes Hall at the University of Chicago. The ball is free for Fermilab graduate students and their guests. Contact Sarah Schloblohm at [sschlobo@nd.edu](mailto:sschlobo@nd.edu) to sign up.

**Flu Shots Still Available in the Medical  
Office/ WH GF-NW**

It is worthwhile to get flu vaccine through the middle of February. Free flu vaccine shots will be available to all active full-time employees, term and temporary employees. Call 840-3232 to schedule an office visit.

**Fermilab Folk Club Barn Dance Sunday**

There will be a Fermilab Folk Club Barn Dance Sunday, January 21, at 2 p.m. with music by Chirps & Friends and calling by Dot Kent. [More Information](#)

**[Upcoming Activities](#)**

***NPR Science Friday***

**January 12, 2007:**

**Podcast about Science Funding, Dark Matter and more...**

[Read More](#)