

## Calendar

### Wed., March 7

**1:00-3:30 p.m.** Fermilab Community Symposium on the International Linear Collider - Auditorium  
Speakers: P. Oddone and C. Quigg, Fermilab;  
B. Barish, California Institute of Technology

THERE WILL BE NO DIRECTOR'S COFFEE BREAK TODAY

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

THERE WILL BE NO FERMILAB COLLOQUIUM THIS WEEK

### Thurs., March 8

**1:00 p.m.** ALCPG ILC Physics and Detector Seminar - Hornets' Nest ( WH-8XO)  
Speaker: T. Raubenheimer, Stanford Linear Accelerator Center

Title: Current ILC Machine Design and EDR Planning

**2:30 p.m.** Theoretical Physics Seminar - Curia II

Speaker: H. Fritsch, Ludwig-Maximilians University, Munich  
Title: Fundamental Constants in Physics and Their Time Dependence

**3:30 p.m.** DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over

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

Speaker: R. Wallny, University of California, Los Angeles  
Title: A Beam Condition Monitoring System for the CDF Experiment

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

## Profile

### Kent Mutchler: teacher, dad and ILC task force member



Geneva schools superintendent Kent Mutchler discusses local concerns at the latest meeting of the Fermilab ILC Citizens' Task Force.

Dr. Kent Mutchler is the superintendent of schools in Geneva, where he, his wife and his four elementary school-aged children moved in July 2006. Since then, he says, they've loved it. "There's a wonderful history in this area," he said. "There are so many things to do and so many things to appreciate." Mutchler is also one of 28 local area residents participating in the recently created ILC Citizens' Task Force at Fermilab.

The role of the task force is to provide guidance and advice to Fermilab about all public aspects of the proposed ILC design. Last Thursday, the group held its second monthly meeting, in which members learned about particle physics. "I realized what the goal is in trying to reduce things and see what comes out of them," said Mutchler, who did research on Enrico Fermi while earning a master's degree in the history of science.

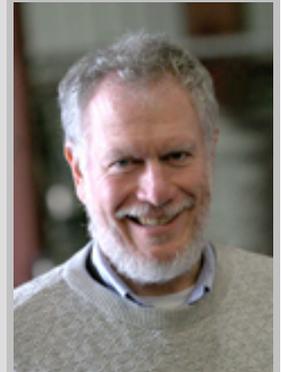
As an educator, Mutchler considers Fermilab a great teaching resource. "Having a premiere research facility like Fermilab close by is wonderful for the surrounding communities," he said, "especially when you're talking about bringing so many well-educated people to the area." He hopes that the ILC task force will help get the word out on the street about the facts and the potential of the proposed ILC. "Many people don't know about it, and people

## From the Technical Division

### Symposium sharpens ILC focus for the lab

*Today's column is written by Marc Ross, head of the Technical Division.*

In calling attention to the Reference Design Report for the International Linear Collider, my Fermilab Today column is well-timed. We have set aside this afternoon for a Fermilab Community [Symposium](#) on the ILC, to be held in the Auditorium. The Symposium's goal is to focus the Lab's attention on the ILC, and we should use the opportunity to ask questions that will help clarify moves toward strengthening our ILC role.



Marc Ross

Last month, on a cold winter afternoon in Beijing, China, the International Committee for Future Accelerators (ICFA) released the 200+ page RDR to the world press. Fermilab, especially the Technical Division, contributed substantially to the RDR and we should take a moment to reflect on what it means to us and how it will be leveraged for our future. The RDR authors include such Fermilab notables as Peter Garbincius, Tom Peterson, Harry Carter, Vic Kuchler, Manfred Wendt, Brian Chase and John Tompkins. For many RDR authors, the report represented their primary activity in 2006 and involved developing new (and strengthening old) relationships with co-workers from other labs around the world. The experience was an effective introduction to the internationally-coordinated design process which we all know will be critical to the success of this ambitious project.

Completion of the RDR is a major milestone for the ILC Global Design team and it is natural to ask: What's next? The RDR is a stepping stone to an engineering and R&D effort. When completed in three years' time, the RDR will be summarized in an Engineering Design Report and submitted to the world's funding agencies in order to seek a green light

**Weather****Partly Cloudy 31°/13°****Extended Forecast****Weather at Fermilab****Current Security Status****Secou Level 3****Wilson Hall Cafe****Wednesday, March 7**

- Creamy Mushroom Chicken Soup
- Cajun Chicken Ranch
- Chicken Wellington
- Italian Sausage with Peppers
- Smoked Turkey Panini Pesto Mayo
- Assorted Slice Pizza
- Chicken Alfredo Fettuccine

[Wilson Hall Cafe Menu](#)**Chez Leon****Wednesday, March 7****Lunch**

- Chicken Satay with Peanut Dipping Sauce
- Oriental Salad
- Jasmine Rice
- Banana Spring Rolls

**Thursday, March 8****Dinner**

- Risotto Cakes with Shrimp with Mustard Sauce
- Medallions of Beef with Cabernet Sauce
- New Potatoes with Dill
- Green Beans with Lemon Zest
- Gran Marnier Soufflé

[Chez Leon Menu](#)

Call x4598 to make your reservation.

**Archives**

need to know what's going on before they get emotionally involved," he said.

Among the task force's greatest challenges will be convincing local residents that the project's infrastructure will be worthwhile, Mutchler said. Despite being buried 300 feet underground, he thinks the collider's 20-mile length will be hard for many people to swallow. "Securing the use of that amount of land will be tough," he said.

Aside from his duties as superintendent, Mutchler collects brightly-colored neckties and reads poetry. He especially likes Robert Frost, and he carries the anonymous poem "[Don't Quit](#)" on his person at all times. "I know that one pretty well by heart," he says.

--Christine Buckley

**Readers Write****Fermilab fleece spotted on Vatican astronomer**

Dear FT:

I thought it might amuse you to know that I've spotted a Fermilab full-zippered fleece in the "[Concord Monitor](#)."

The story is an account of a lecture given in Concord, New Hampshire, by Brother Guy Consolmagno of the Vatican Observatory. It's accompanied by a photo of Guy, who has given a colloquium at Fermilab and visited on other occasions, wearing his Fermilab fleece jacket.

I don't suppose that Jesuit astronomers are fashion trend-setters, but it's still nice to see the Fermilab logo turn up in an unexpected place.

--Bill Higgins

**In the News**

for project preparation and start. Anticipating the challenge, I look forward to a redoubling of Fermilab's effort in support of the EDR and the R&D tasks that support it. I believe that we are ready to do so.

**Special Announcement****Build and fly a delta dart on Wednesday, March 14**

Delta darts are small rubber band-powered airplanes that can be built in less than an hour. Next Wednesday, March 14, everyone is invited to the Kuhn Barn for a delta dart-making party and flying contest. All required materials will be provided by Fermilab's model airplane club, the Barnstormers. The competition for the longest time of flight starts at 7 p.m. sharp; if you plan to compete, please arrive no later than 6 p.m. to start construction on your airplane. Prizes will be given in two categories: adults and children, 12 and under.

Learn more about the Barnstormers [here](#).

**Announcements****"When the Irish Cows are Smiling," last day to order tickets**

Celebrating their 5th season of sold-out shows, the Milk Pail Restaurant and Entertainment Complex in East Dundee presents "When Irish Cows are Smiling" on March 16 at 6:30 p.m. The cost for this event is \$35 per person, which includes dinner, show, tax and tip, plus a free Irish cow coffee mug or pint glass. Offer expires noon, March 7 (today). For more information and order forms visit the [Recreation webpage](#) or in the Recreation Office.

**Muscle Toning Class**

Muscle Toning classes will be held on Tuesday and Thursday evenings in the exercise room of the Recreation Facility from 5:30 p.m. to 6:30 p.m., March 15 to April 19 (No class Apr. 10). All classes last four weeks and cost \$32.00. Registration and payment must be made through the Recreation Office

[Fermilab Today](#)[Result of the Week](#)[Safety Tip of the Week](#)[ILC NewsLine](#)**Info**

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[www.fnal.gov/today/](http://www.fnal.gov/today/)

Send comments and suggestions to:  
[today@fnal.gov](mailto:today@fnal.gov)

**Physics Web, March 6, 2007:****Fermilab data hint at Higgs boson**

*Physicists working at the HyperCP experiment at Fermilab in the US claim they may have glimpsed the first Higgs boson -- the particle many think is responsible for all mass in the universe. However, for their claim to be correct our current 30-year-old Standard Model of particle physics would have to be set aside in favour of an alternative "supersymmetric" model (Phys. Rev. Lett. 98 081802).*

The great triumph of the Standard Model is that it unites two of the fundamental forces – the weak and electromagnetic force – into a single, symmetric "electroweak" force at high energies. But at low energies, a symmetric electroweak theory would imply that particles have no mass, which is clearly wrong.

This is where the Higgs boson comes in – a particle that can break the electroweak symmetry at low energies. If our current Standard Model is correct, the much-sought Higgs would have a mass somewhere in the 100 GeV to 1 TeV region, which should allow physicists to discover it at the 14 TeV Large Hadron Collider at CERN once it starts up in November.

[Read More](#) (registration required)

no later than the Friday prior to the start of the session. You must be a current Recreation Facility member to participate.

**Hatha Yoga Classes**

The next session of Yoga Classes will run from March 20 to May 8 on Tuesdays at lunchtime in the Auditorium. The cost for the eight-week session is \$80.00. Registration can be made through the [Recreation Office](#). A mat is required. A Recreation Facility membership is NOT required.

**[Upcoming Activities](#)**