

Calendar

Tuesday, November 14

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

THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

Wednesday, November 15

11:00 a.m. Fermilab ILC R&D Meeting - 1 West

Speaker: M. Demarteau, Fermilab
Title: Review of ILC Detector Events and Actions at the Valencia GDE/ECFA Meeting

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

4:00 p.m. Fermilab Colloquium - 1 West
Speaker: P. Sikivie, University of Florida
Title: The Search for Axion Dark Matter

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

Weather



Patchy Fog **45°/35°**

[Extended Forecast](#)

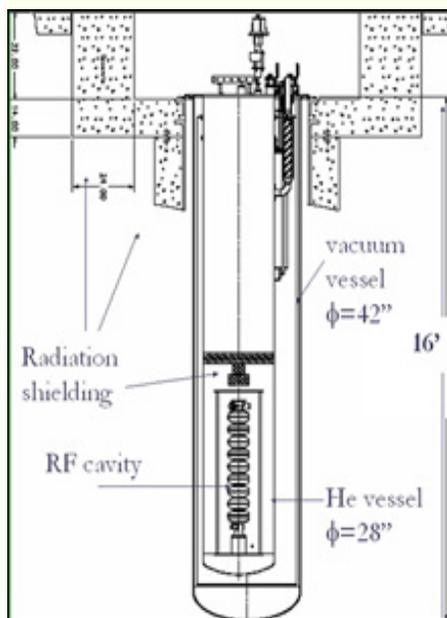
[Weather at Fermilab](#)

Current Security Status

[Secou Level 3](#)

Wilson Hall Cafe

Vertical test stand under construction at Fermilab



A schematic diagram of the vertical test stand that is now under construction at Fermilab.

Fermilab has a new hole in the ground--a 7 meter deep hole to be precise. While a very large rabbit on site might find that it makes for a cozy home, this hole located in the Industrial Building is the start of construction for the lab's first Vertical Test Stand for qualifying superconducting cavities for the International Linear Collider.

Starting in mid-2007, Fermilab will use this vertical test stand to test bare 1.3 Ghz 9-cell niobium cavities. During a vertical test, physicists apply an RF voltage to a superconducting cavity and measure the Q (or quality) factor--a measure of the rate of energy loss. A high Q factor means that the cavity will better retain the energy pumped into it--a desirable outcome from the vertical test stand process. In order for the ILC to

Director's Corner

DOE National Laboratories

Later today, at the celebration of the 75th anniversary of the Lawrence Berkeley National Laboratory, I will give the closing talk on the future science of the national laboratories. Not many years ago, it was still possible to find Berkeley citizens



Pier Oddone

who knew the place only as the Rad Lab, the abbreviated name of the legendary Radiation Laboratory founded by E.O. Lawrence, a great pioneer of accelerator physics. From its modest beginnings in the early thirties on the Berkeley campus, the laboratory steadily gained momentum as Lawrence built ever larger cyclotrons. They opened the exploration of particle and nuclear physics and associated applications like nuclear medicine. Over the decades, the laboratory has evolved into a thriving multiprogram laboratory contributing in many areas of science.

Following this model, other laboratories were created during and following World War II. Fermilab, established in the late 1960s, is a relative newcomer to the DOE system of laboratories. All these laboratories share values and characteristics that have served the nation well over the years and that provide a guide towards the future contributions they will make to the nation's scientific enterprise.

Foremost among those values is that of

Tuesday, November 14

- Golden Broccoli and Cheese
- Cheesy Greek Squeeze
- Coconut Crusted Tilapia
- Toasted Almond Chicken Salad on Crossaint
- Spaghetti with Meatballs
- Assorted Slice Pizza
- Chicken Fajitas

[Wilson Hall Cafe Menu](#)

Chez Leon**Wednesday, November 15****Lunch**

- Calzone of Bacon, Cheese and Cabbage
- Marinated Vegetable Salad
- Coffee-Chocolate Coupe

Thursday, November 16**Dinner**

- Tortilla Soup
- Swordfish and Vegetable Kebobs
- Lemongrass Rice
- Cassata

[Chez Leon Menu](#)

Call x4598 to make your reservation.

Search

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smash together electrons and positrons at a high energy of 500 GeV, the superconducting cavities must produce high electric fields to accelerate the particles. A good Q factor means they will do this as efficiently as possible, without large energy losses to the cryogenics system. The vertical test stand thus becomes part of the qualification process for determining that the cavities meet all of the extraordinary needs of the ILC. Vertical tests also serve to verify whether the cavity preparation procedures are sufficient.

[Read More](#)

Photo of the Day

Waiting for a call: Dan Bauer of CDMS sent this picture from the Soudan Mine shaft in Minnesota. "This bat was perched in the mine on one of the phones that we use to call the engine house," wrote Bauer. "Apparently he really didn't want us to use the phone; maybe he was waiting for an important call."

In Memoriam**Howard Dixon**

Former Fermilab employee Howard Dixon passed away Friday, November 10. He was 77 years old. There will be a memorial service at Conley Funeral Home in Elburn later in the week. You can contact his son, Rick Dixon, at richard.dixon@intel.com.

team science--necessary to carry out large-scale research. The field of particle physics has been at the forefront of team science. Today all the accelerators and detectors at the frontier of exploration are tackled with large teams based on broad national and international collaborations. These teams bring many different disciplines to accomplish their scientific goals. This model has been carried to other disciplines as well. At light sources, large research teams develop the sophisticated beamlines and detectors. The human genome project was organized as a world collaboration with many similarities to the large particle experiments we are familiar with.

A key element of this team approach is the close connection of the national laboratories to the universities. Not only are universities involved in managing many national laboratories, but the relationship between researchers at universities and the facilities and researchers at the laboratories has created an enterprise of great effectiveness. Fermilab, as the only DOE laboratory solely devoted to particle physics, has a great responsibility to support the national universities in the development of the nation's particle physics program.

Accelerator Update

[Linear Collider News archive](#)

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In the News

Chicago Tribune, November 11, 2006:

The 18-mile road to the future

The Chicago area is home to two of the greatest research laboratories in the world--Fermi National Accelerator Laboratory in Batavia and Argonne National Laboratory near Lemont. They are separated by less than 18 miles, but now will be linked for the first time by a common parent--the University of Chicago.

Bringing these two great labs together under one leadership umbrella comes at a critical moment. It has huge implications not only for an important industry in Chicago that generates nearly 5,000 jobs, but also for U.S. pre-eminence in global scientific research.

Both research facilities are owned and their operations are funded by the Department of Energy. The U. of C. has operated Argonne for the government since that lab was founded 60 years ago. The U. of C. has always been a member of the group of 90 universities that operate the 39-year-old Fermilab, but now it will take the lead role there as well, the DOE has decided. The U. of C. will operate Fermi in partnership with the university consortium under the newly created Fermi Research Alliance. Drawing on additional local excellence, the heads of the University of Illinois, Northwestern University, the Illinois Institute of Technology and Northern Illinois University also will serve on the board.

[Read More](#)

November 10 -13

- Three stores provided 55 hours and 34 minutes of luminosity
- Recycler has emittance problem
- Cable for Booster chopper fails
- Pbar LCW leak

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

Announcements

Fermilab Folk Club Barn Dance

There will be a Fermilab Folk Club Barn Dance Sunday, November 19 at 2 p.m. with music by Genevieve & Smith and calling by Lynn Garren. This is our first afternoon dance of the season.

[More Information](#)

Join the Fermi Singers

The Fermi Singers are preparing for a Holiday performance at the Naper Settlement in Naperville, and we'd like more singers for the event. Join us on Wednesday's at noon in the Auditorium if you'd like to rehearse with us. Contact Anne Heavey, the group's President, if you have questions at aheavey@fnal.gov.

Scottish Country Dancing

Scottish Country Dancing will meet Tuesday, November 14, at Kuhn Barn. Instruction begins at 7:30 p.m. and newcomers are always welcome. Most dances are fully taught and walked through, and you do not need to come with a partner. Info at 630-840-8194 or 630-584-0825 or folkdance@fnal.gov.

[Upcoming Activities](#)

