

Calendar

Fri., March 23
3:30 p.m.

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

4:00 p.m.

 Joint Experimental-Theoretical
 Physics Seminar - 1 West WH-
 8XO

 Speaker: M. Goncharov, Texas
 A&M University

 Title: Searches for Heavy Long-
 Lived Particles at CDF

Mon., March 26
2:30 p.m.

 Particle Astrophysics Seminar
 - Curia II

 Speaker: V. Pavlodou,
 University of Chicago

 Title: Deciphering the GeV
 Sky: Gamma-Ray Astronomy
 in the Era of GLAST

3:30 p.m.

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

4:00 p.m.

 All Experimenters' Meeting -
 Curia II

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

Weather


Showers 59°/45°

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

[Secon Level 3](#)

Wilson Hall Cafe

[Wilson Hall Cafe Menu](#)

Chez Leon

Feature

Lab increases preventive care limit starting April 1

To maintain momentum for our wellness efforts, Fermilab's Workforce Development and Resources Section has elected to increase the annual in-network preventive care limit for the CIGNA Open Access Plus from \$300 to \$750 per participant effective April 1, 2007. Preventive care from OAP includes tests such as mammograms, PSA, pap smears and blood screenings for cholesterol and diabetes. To obtain a more detailed description of preventive care guidelines for the entire family, go to the MY CIGNA [website](#). This improvement will not cost you one more penny in monthly insurance premiums.



If you have your medical coverage with CIGNA POS or Blue Cross/Blue Shield with either HMO IL or Blue Advantage, you may use preventive care benefits by coordinating through your primary care physician. All preventive care exams and tests that are provided through your PCP, and that follow general accepted medical practice, are covered as often as recommended by your PCP.

Your dental hygiene is another important in your total wellness. Recent studies have linked gum diseases to strokes and heart attacks. Our dental plans cover preventative care by providing for two routine cleanings and two oral exams per year covered at 100%.

Fermilab is doing its part by increasing the preventive care limits for OAP and providing with you with the tools on how to access this information. We hope that you will take advantage of this important enhancement and make it a part of your yearly spring routine by scheduling the appropriate tests or exams for your entire family.

--Kay Van Vreede, Head of WDRS

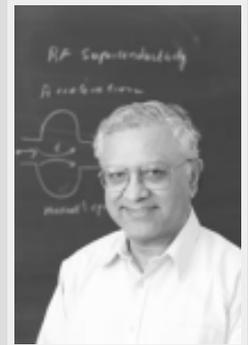
In the News

ILC Newsline

ILC Baseline Alternative: The Re-entrant Cavity

This column is written by GDE director Barry Barish.

ILC R&D on superconducting RF technology is of special importance because it represents our central technology, and it is an area where we are forging the way for future accelerators that will employ this forward-looking technology. In addition to the high-priority demonstrations of the achievable gradient for our baseline TESLA-shape cavities, we are



Hasan Padamsee,
 leader of the
 Cornell
 superconducting
 RF R&D group

pursuing a broad R&D programme on alternatives that should lead to improved cavities. Our programme includes work on single crystals, on large grain materials and on alternative shapes to the baseline. One such alternate shape is the re-entrant cavity that promises higher gradients than the TESLA cavities. In fact, two different new shapes have already achieved higher gradients in early, mostly single-cell tests. Although it will take time to develop these alternative shapes to the point where we can produce 9-cell cavities, we fully expect this will be feasible by the time we are ready to upgrade the ILC to 1 TeV, if not before.

[Read More](#)

In Memoriam

Wednesday, March 28**Lunch**

- Stuffed fillet of sole
- Green rice
- Steamed asparagus
- Apple raisin turnovers

Thursday, March 29**Dinner**

- Clam chowder -Filet mignon -
- Vegetable of season -Potato dauphinois -Chocolate soufflé w/frangelico cream anglais

[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/

Send comments and suggestions to: today@fnal.gov

SCIENCE**March 23, 2007:****LARGE HADRON COLLIDER: Stability, International Character Honed CERN's Competitive Edge**

The qualities that helped the lab make the LHC a reality could put it a step ahead in the race for the next great particle smasher

In the 1980s, physicists hammered out plans for a gargantuan particle smasher that would reveal the key bit of matter that would complete their theory of the known particles. The behemoth would also blast out scads of new particles and open new vistas of inner space. It would be the hub about which the world of particle physics would turn for decades.

Meanwhile, a few researchers at the European lab, CERN, near Geneva, Switzerland, mused of building a smaller machine on the cheap. They called it the Large Hadron Collider (LHC).

Two decades later, the LHC is about to chase the discoveries never made by that other machine, the infamous Superconducting Super Collider (SSC). Designed to reach energies three times higher than those of the LHC, the SSC died uncompleted in 1993 when its budget ballooned from \$4.6 billion to more than \$8.3 billion and the U.S. Congress killed it.

Why did the SSC fail and the LHC succeed? Physicists can point to many stumbling blocks that tripped up the SSC (Science, 3 October 2003, p. 38). Instead of building at an existing lab, officials chose a remote site in Waxahachie, Texas; researchers made a small but expensive design change; the United States tried to go it alone and sought international partners only belatedly. The LHC succeeded for reasons equally concrete--and those factors could give CERN the edge in the competition for the next gigantic collider, the proposed 31-kilometer-long straight-shot International Linear Collider (ILC).

[Read More](#)**Jeff Nelson**

Jeff Nelson of the BSS Procurement Department passed away on Sunday, March 18 after a long bout with cancer. Jeff had worked at the lab since 2001. Services have been arranged to celebrate Jeff's life on Sunday, March 25, at 3:30:00 p.m., at the Evangelical Church of Sycamore/DeKalb. The church is on the corner of Bethany Road and North First Street. From US-38 go north on IL-22, or from US-64 go south on IL-22 to Bethany Rd, then east.

Announcements**Workshop: Finding the right investment strategy**

Rodney T. Weems from Fidelity Investments will hold a workshop titled, "Finding the Right Investment Strategy" on Monday, March 26. The materials presented provide an overview of the investment options offered by Fidelity. The workshop will be offered at 10:00 a.m. and 1:30 p.m. in Wilson Hall 1 West. To reserve your space, please call 1-800-642-7131. Since the meeting is during working hours and will last for an hour, you will need your supervisor's approval to attend. If you have any questions, please call Wilma Cardona at x6800.

EAP office closures

The on site Employee Assistance Program office will be closed Wednesday, March 28 and Friday, March 30. As always, EAP is available 24 hours a day, seven days a week by calling 1-800-843-1327 or by visiting the [EAP website](#). Find more information [here](#).

The Next Fermi Kyuki-Do Martial Arts Class begins on April 9

Kyuki-Do combines the strikes of Taekwon-Do, the throwing and grappling techniques of Judo and Jujitsu, the joint locks of Hapki-Do, and the practice of Kobudo (traditional weapons) into one art. Classes are held on Monday and Wednesday from 5 - 6 p.m. at the Recreation Facility in the Village. Teacher Bruce Worthel will focus on a practical self-defense that can be used by women or men. You will learn kicks, blocks, hand techniques, throws, pins, self-defense, and forms that will teach you balance, power, and grace. Register through the Recreation Office; classes cost \$45 per 6-week session. You must be a member of the recreation facility to join.

Classifieds

New [classified ads](#) have been posted on



Fermilab Today.

Upcoming Activities