

## Calendar

### Thursday, May 5

**1:30 p.m.** Special Particle Astrophysics Seminar (NOTE DATE, TIME, LOCATION) - One North

Speaker: M. Jarvis, University of Pennsylvania

Title: Cosmological Constraints from the CTIO Weak Lensing Survey

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

Speaker: B. Ermolaev, Ioffe Physics Technology Institute

Title: Impact of the Total Resummation of the Leading Logarithms on the Small  $x$  Behavior of the Spin Structure Function  $g_1$

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

### Friday, May 6

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

**4:00 p.m.** Joint Experimental Theoretical Physics Seminar - 1 West

Speaker: V. Khoze, University of Durham

Title: Central Exclusive Production of Higgs Bosons and Other States

**8:00 p.m.** Fermilab International Film Society - Auditorium

Tickets: Adults \$4

Title: Uzak (Distant)

### Saturday, May 7

**8:00 p.m.** Fermilab Arts Series - Auditorium

Hibiki: A Celebration of Japan's Musical Heritage

## Grid Physicist Joins "Quantum Diaries"

Yesterday the University of Chicago's Rob Gardner joined over 30 other physicists worldwide telling the story of their lives as 21st-century scientists in "Quantum Diaries." Gardner will share with readers the ups and downs of work as a particle physicist and grid computing researcher as well as his thoughts and experiences outside the world of science.



Rob Gardner

"The Diarists are giving people in many countries a great view of the diverse lives of scientists," said Gardner. "I hope to add a new dimension to the blogs, by writing about my work in distributed computing infrastructures, my love of Chicago architecture and much more over the next year."

[read more](#)

- Katie Yurkewicz

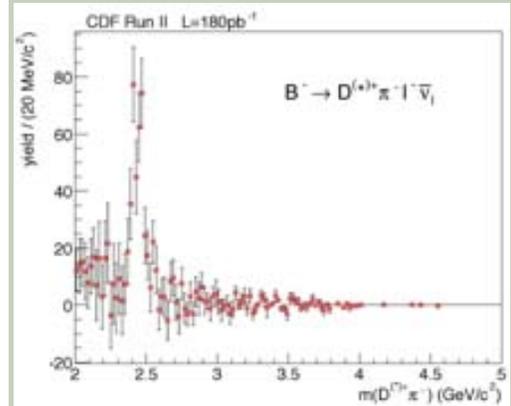
## Michael Barbor's Pursuits Cover Cryogenics To Germs



Michael Barbor stands next to a portable valve box he worked on. (Click on image for larger version.)

## Fermilab Result of the Week

### From B Mesons to the b Quark



Mass distribution of high-mass D mesons produced in association with electrons or muons in B meson decays, as seen with the CDF detector. Well-measured D meson states (known as  $D^0$  and  $D^{*0}$ ) are not shown. (Click on image for larger version.)

The study of quarks serves to reveal the workings of the universe at very small length scales. However, quarks exhibit a peculiar property known as confinement, whereby they inextricably bind themselves into composite particles called hadrons. Hadrons count among their number the familiar proton and neutron, but also a bewildering zoology of hundreds of other short-lived, exotically-named particles. The experimentalist, then, necessarily observes quarks shrouded beneath their hadronic veils.

Far away from the high vacuum of the Tevatron beam pipe, phenomenologists come to the rescue with theoretical models relating the behavior of hadrons to the properties of their

constituent quarks. But their job is not complete without further input from experiment. Studying decays of the B

Tickets: \$20/\$10

## Weather



Sunny 70°/48°

[Extended Forecast](#)

[Weather at Fermilab](#)

## Current Security Status

[Secou Level 3](#)

## Wilson Hall Cafe

### Thursday, May 5

Minnesota Wild Rice with Chicken

Tuna Melt on Nine Grain \$4.75

Breaded Veal with Mushroom Cream

Sauce \$3.75

Chicken Casserole \$3.75

BLT Ranch Wrap \$4.75

Cheesy Breadsticks \$2.25

Chicken Pecan Salad \$4.75

The Wilson Hall Cafe now accepts Visa, Master Card, Discover and American Express at Cash Register #1.

[Wilson Hall Cafe Menu](#)

[Chez Leon](#) is now open. Call x4512 to make your reservation.

## Search

[Search the Fermilab Today Archive](#)

## Info

After working as a designer for 38 years, including 14 years at Fermilab, Accelerator Division's Michael Barbor will retire today (May 5). Barbor has focused on improving the reciprocal cold compressors, which work with the expansion engines so the helium pumps can cool the superconducting magnets with increased power at lower temperatures. Barbor also was in charge of half of the Tevatron's cooling stations before his retirement.

Before coming to Fermilab, Barbor designed fluid bed coal reactors at Kellogg-Rust-Westinghouse, and components for Triton-class nuclear submarines at General Dynamics. But he has enjoyed his time at Fermilab the most. "The people here are great," he said. "It is like a college campus. Everyone is easy to talk with, and you associate with people from all walks of life." He will continue to be a Fermilab neighbor. "I have to make sure the lab will run without me," he said with a laugh.

Barbor is from the Latrobe, Pennsylvania neighborhood, home of the late television personality Mr. Rodgers, of professional golfer Arnold Palmer, and of Rolling Rock beer. He and wife Sandra have two boys, Michael and Allen. Barbor will spend his retirement traveling, and marketing a reusable static-cling Mylar strip for grocery cart handles that stops contact-spread diseases.

- Eric Bland

meson, a hadron abundantly produced at the Tevatron, a group of CDF experimenters from Lawrence Berkeley Laboratory have [strengthened our knowledge](#) of just this piece of the puzzle.



Author Laurent Vacavant, formerly LBL, now a staff scientist at CPPM Marseille, France.

The B meson, which contains a bottom quark, provides special insight into fundamental symmetries and parameters of the universe, and is thus the subject of extremely intense study at both the Tevatron and the so-called B factories. Of the myriad decays of the B meson, roughly one-fifth of the time a muon or an electron and some variety of D meson is produced. By measuring the shape of the mass distribution of these D mesons, the CDF group has provided crucial inputs to phenomenological models of B mesons, substantially enhancing the theorist's ability to relate observed properties of B mesons to the fundamental parameters of the microscopic world.



Pictured(left to right): Authors Hung-Chung Fang (grad student), Ramon Miquel (staff scientist), Marjorie Shapiro (UC Berkeley professor), Alessandro Cerri (postdoc), all of LBNL. (Click on image for larger version.)

[Result of the Week Archive](#)

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## AD's Kenneth Kellogg Retires After 13 Years

Accelerator Division's Kenneth Kellogg retired from Fermilab three weeks ago on April 12. He joined Fermilab in September 1991 and has worked hard to build and maintain the controls for the kicker magnets. The kicker magnets



Kenneth Kellogg

help shuttle the particles from one machine to another.

The Illinois native is easing into his retirement with frequent visits to the

lab to play cards with his friends. "Things really haven't changed all that much for me since I retired," said Kellogg, who served with the Army Signal Corps in Europe. "Everyday is just more like Sunday now." Eventually he plans to spend time traveling, but for now he relaxes with his son Richard and his wife Joy in their home in Downers Grove.

- Eric Bland

### Milestones

#### Retired

- Phyllis Klen, DIR, May 5, 2005

### In the News

#### From Lewis-Burke Associates, May 2, 2005

#### FY06 Budget Update: Overall Spending Parameters Set By Congress: Appropriations Process Set to Move Forward

House and Senate negotiators reached an agreement last week on the FY06 federal budget by passing a budget resolution. The budget resolution is a macro-spending blueprint that guides the development of subsequent individual appropriations bills – legislation that

### Accelerator Update

#### May 2 - May 4

- During this 48 hour period Operations established one store that combined with an existing store provided approximately 32 hours and 32 minutes of luminosity
- TeV quench loses store
- NuMI loses power

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

### Announcements

#### Fermilab Arts Series

The Arts Series presents "Hibiki: A Celebration of Japan's Musical Heritage" on May 7 at 8:00 p.m. in Ramsey Auditorium. There will be a free pre-concert talk at 7:00 p.m. Tickets are \$20 (\$10 ages 18 and under).

[more information](#)

#### Fermilab Film Series

The Fermilab Film Series presents Uzak (Distant) at 8:00 p.m. on May 6 in Ramsey Auditorium.

[more information](#)

#### Retirement Luncheon

There will be a retirement Luncheon for Howard Brooks, John Carson, Nelson Chester and Andy Oleck on Monday, May 9, 2005 at The Courtyard at noon. The Courtyard is located at 3S200 Route 59, Warrenville, 393-3130. If you would like to attend, please R.S.V.P. and send \$22.00 to Helen Jensen (x3208) or Erene Noyola (x3729) or Rica Peterson (x2806) or Karen Swanson (x3738) by Friday, May 6. The \$22.00 includes a buffet, coffee, tea, pop, dessert, tax and gratuity.

#### Children's Swim Lessons -

actually funds agencies and programs.

[read more](#)

## **FYI: AIP Bulletin of Science Policy News, May 4, 2005**

### **Chairman Wolf Urges Bush to Triple Federal R&D Funding by Next Decade**

Rep. Frank Wolf (R-VA) has sent a letter to President George Bush asking him "to develop the necessary consensus that will ensure America will remain the world's leader in innovation" by a "tripling [of] the innovation budget - federal basic research and development - over the next decade." Wolf is the chairman of the newly-formed House Science, State, Justice and Commerce and Related Agencies Appropriations Subcommittee. Since the subcommittee's formation in mid-February, Wolf has quickly established himself as a strong supporter of science, having jurisdiction over funding for the National Science Foundation and NASA, and as the author of a bill that would provide interest-free loans to students studying science, mathematics or engineering.

[read more](#)

## **Registration Begins in May**

The YMCA will again be conducting Children's Swim Lessons at Fermilab. Lessons are open to children of employees, users, and approved contractors ages 4 yrs. to 12 yrs. Registration must be made through the Recreation Office by completing a registration form and returning the completed form with the appropriate payment to the Recreation Office, WH15W, M.S. 126. There is a STRICT Registration deadline for each session at noon the Thursday prior to the start of the session.

[more information](#)

## **NALWO Spring Tea**

There will be a NALWO Spring Tea on May 12 from 11:00 a.m. to 1:00 p.m. at Site 29.

[more information](#)

## **Recreation T-Shirt Final Close-Out Sale**

This is your last chance to purchase the Recreation T-shirt at the final close-out price of \$6.00. T-shirts are available in sizes Medium, Large and X-Large in the colors of Yellow and Gray, while quantities last. T-shirts can be viewed and purchased in the Recreation Office.

[more information](#)

## **[Upcoming Activities](#)**