Fermilab Today

Friday, May 4, 2007

Calendar

Fri., May 4
3:30 p.m.
DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
4:00 p.m.
Joint Experimental-Theoretical Physics Seminar - 1 West
Speaker: J. Hubisz, Fermilab
Title: Tools for the LHC: Beyond the Standard Model
8:00 p.m.
Fermilab International Film Society - Auditorium
Tickets: Adults $5
Title: Grizzly Man

Announcement
Real Time Computing 2007 will be held at Fermilab on April 29 – May 4, 2007
Click here for more information.

Mon., May 7
2:30 p.m.
Particle Astrophysics Seminar - Curia II
Speaker: G. Thomson, Rutgers University
Title: Observation of the GZK Cutoff by the HiRes Experiment
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

Chance of showers, thunderstorms 65°/51°

Extended Forecast
Weather at Fermilab

Current Security Status

Milestone

Scintillating: Sergey Densiov marks 70th birthday today

Sergey Denisov's many contributions at Fermilab since 1980 include the early production of more than 4,200 scintillation counters.

Today Fermilab celebrates the 70th birthday of Sergey Denisov, and honors his nearly 30 years of service with the lab. Denisov is the leader of the Russian groups at DZero, and His many colleagues respect his dedication to teaching and research.

"I always have admired his enthusiasm, his devotion to physics and his energy that he shares with others," said Igor Vasilyev of DZero and IHN-Protvino (Russia), a student of Denisov's from 1995 to 1998.

Denisov supervised the early production of more than 4,200 scintillation counters, which are now a significant component of the upgraded DZero experiment "He's one of the true leaders, one of the special small number of particle physics leaders around the world," said Fermilab Assistant Director Roy Rubinstein. "And, by the way, he doesn't look 70."

Denisov was a leader of the Russian group in the first ever East-West particle physics experiment between IHEP and CERN, conducted at IHEP in Protvino, Russia in 1968-1972. Aside many other experiments performed in Russia and United States, Denisov said he is most proud of his work with two projects: total cross sections measurements where the rise of total cross sections was observed for the first time and DZero experiment where the top quark was discovered. .

Feature

Kate Beers will present OSTP outlook at Users' Meeting

Kate Beers

Kate Beers, acting associate director for physical sciences at the Office of Science and Technology Policy, will be a featured lecturer at Fermilab's 2007 Users' Meeting on June 5-6. She will discuss the role of OSTP in high energy particle physics and astrophysics research. Beers said she is looking forward to touring Fermilab and attending the poster sessions during her visit.

At OSTP, Beers helps coordinate efforts with the Department of Energy, the National Science Foundation and NASA. "It involves a lot of meetings," she said with a laugh. Beers holds a PhD in chemistry from Carnegie Mellon University. She loves her one-year assignment at OSTP because she learns about areas of science she never studied. "It's new to me," she said. "I am really enjoying the experience."

She plans to return to her materials science position at the National Institute of Standards and Technology, where she studies new measurement methods for polymers, particularly in biomaterials and nanostructured materials.

-- Kate Raiford

ILC Newsline

Secon Level 3

Wilson Hall Cafe

Friday, May 4
- Beef pepper pot
- Buffalo chicken wings
- Cajun breaded catfish
- Sweet & sour pork over rice
- Honey mustard ham & Swiss panini
- Assorted pizza slices
- Carved turkey

Wilson Hall Cafe Menu

Chez Leon

Wednesday, May 9
Lunch
- Roast pork loin
- Orange roasted carrots w/ honey
- Pea pod salad w/ radishes
- Apple walnut raisin strudel

Thursday, May 10
Dinner
- Salad of field greens w/ jicama, radishes, oranges, pine nuts & queso rico w/ balsamic vinaigrette
- Beef short ribs in chipotle green chili sauce
- Cumin roasted sweet potatoes
- Strawberry sorbet w/lemon sugar cookies

Chez Leon Menu

Call x4598 to make your reservation.

Archives

Fermilab Today

Result of the Week

Safety Tip of the Week

ILC NewsLine

Info

Denisov studied under the guidance of many famous Russian physicists, and he watched Russian science's changes as the Soviet Union disintegrated. "It was a very unique period in history," said his son Dmitri Denisov, Dzero's co-spokesman. Sergey Denisov is still dedicated to the work of his mentors. "Now he is keeping their work alive for a younger generation," Dmitri Denisov said. Twelve of Sergey Denisov's former students are currently working at Fermilab and at several U. S. universities.

"I enjoy working at Fermilab, where people are professional and friendly, and ready to help," Sergey Denisov said. "Plus it has the world's biggest accelerator." Denisov has published hundreds of articles during his career and is an elected member of the Russian Academy of Sciences. He holds a chair at Moscow State University, where he teaches part-time. He has received birthday cards from around the world.

-- Kate Raiford

Feature

Hard to say goodbye: Jim Garvey retires after 37 years

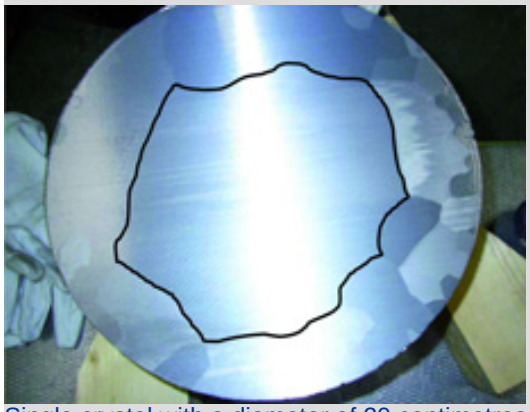

Jim Garvey

Today, as the work day comes to a close, Jim Garvey, senior associate engineer in Fermilab's Technical Division, will leave the lab one last time. Although he's sure he'll be back to visit, he's hanging up his hat as a lab employee, retiring after 37 years. "I'll miss the people," Garvey said. "This has been a really difficult week, with everyone stopping by. You forget just how long you've known some people."

During his time at the lab, Garvey has made what Romesh Sood, associate head of the Technical Division, calls "numerous and exemplary" contributions, particularly in AC power distributions, DC power supplies, electrical safety and lock out-tag out. Garvey said he has enjoyed his time at Fermilab immensely, and fondly recalls the projects and milestones he's been fortunate enough to be a part of, including the Tevatron and getting the beam around the Main Ring at 200 MeV.

"In 37 years, he never had an electrical

New production technique in view for niobium cavities


Single crystal with a diameter of 20 centimetres—scientists are only satisfied with a diameter of 26,5 centimetres.

In the development of superconducting cavities for the ILC, the machine planning group (MPL) lands another success. New prototypes manufactured from a so-called niobium single crystal plate yield excellent results. The advantage of single-crystal cavities compared with standard ones made of polycrystalline niobium lies in the atomic structure of the crystal lattice.

Polycrystalline metal has a lattice that is not always arrayed regularly, leading to sharp edges and unequal orientations in the crystal grid. These ruptures, called grain boundaries, basically reduce the performance of a cavity.

Read more

Readers Write

Where is Felicia the ferret?

A lab history quiz conducted by the Education Office last week prompted our readers Mike Vincent and Marty Murphy to read more about the early days of Fermilab. Now they are asking the question: What happened to Felicia?

Felicia was the name of the ferret turned media star that played a crucial role in cleaning the interior of accelerator beam pipes in 1971. Living

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www.fnal.gov/today/

Send comments and suggestions to:
today@fnal.gov

incident," said Sood. Garvey said he has no secret for staying incident free, he "just always questions what the exposure is, and then eliminates it or mitigates it."

During his retirement, Garvey said he's looking forward to relaxing and having fun, which includes traveling with his wife and fishing.

-- Rhianna Wisniewski

In the News

From *Nature.com* May 2, 2007:

Particle physics: Wobbly oscillations

Neutrinos seem to oscillate: they change back and forth between one type and another and, by extension, have a tiny mass. But one experiment that predicted a particularly large mass looks to have been mistaken.

When is a discovery not a discovery? When it can't be reproduced, of course. That scientific ground-rule has plagued the members of the LSND (Liquid Scintillator Neutrino Detector) collaboration since they first saw evidence1 for so-called neutrino oscillations. Had the LSND results been confirmed, they would have rewritten much of what we think we know about the ever-elusive neutrinos (Box 1). But results just announced2 from the MiniBooNE detector at Fermilab, near Chicago, could prove those earlier results' nemesis.

The story begins in 1996, with observations made by LSND of the decay products of a pion particle beam at the Los Alamos Meson Physics Facility (LAMPF) accelerator in New Mexico. The neutrinos came mainly from the decay of positively charged pions into positive muons and muon neutrinos, and the subsequent decay of these positive muons to positrons (positively charged electrons), muon antineutrinos and electron neutrinos (Fig. 1a). What the LSND collaboration found on examining the reaction products was an excess of electron antineutrinos1 — which are produced nowhere in the positive-pion decay chain. The conclusion was that muon antineutrinos were changing into electron antineutrinos while propagating. This is the process known as neutrino oscillation, and is itself by now relatively uncontroversial3. But the oscillations that LSND saw seemed to indicate much larger neutrino mass differences than other experiments had predicted. That was indeed controversial.

Felicia Ferret at the end of a successful run. In 1971 employees found a solution for cleaning out the stray steel particles from the Meson Lab lines - Felicia, a fur-covered pipe cleaner. After rising to national fame in 1971, Felicia died a year later. Her body was supposed to be stuffed and mounted. *Photo by Tim Fielding, NAL*

in semi-retirement, Felicia died on May 9, 1972. According to a story in the Village Crier, "It is planned that Felicia's body will be stuffed and mounted, to be displayed permanently as a symbol of early NAL development problems and solutions." (Village Crier, May 18, 1972,)

Vincent and Murphy write:

"We can't help but wonder what really happened to Felicia. Was she ever put on display? here is she now? Did someone redecorate and decide ferrets didn't fit the new decor? Has poor Felicia been relegated to a dusty closet somewhere on site? If so, we think she should be rescued and put back on display, perhaps next to the buffalo head in the User Center."

If you have any information that help to solve this mystery, please email Fermilab Today.

Announcements

Retirement counselor on site
Fermilab's Fidelity retirement counselor, Rodney Weems, will be on site on Friday, May 11, 2007. If you would like to schedule a retirement counseling appointment, please call 1-800-642-7131. Rodney is available from 9:30 until 3:00.

Fermi Singers concert
The Fermi Singers will be holding a concert on May 25 at noon in Ramsey Auditorium. Treats are available after the concert.

Hatha Yoga Class
Learn the benefits of Yoga: distress, lower blood pressure, improve circulation and get clarity and piece of mind. Learn to restore and repair the body with relaxation poses and proper breathing. The next class will begin May 15 and run through July 10 (no class July 3) on Tuesdays from noon to 1 p.m. in the Auditorium WHGF. This cost for this eight-week class is $80.00. The only thing you need to bring is a yoga mat and yourself. This class is open to men and women, beginner or advanced, good shape or bad, young or older. Register in the Recreation Office, by mail, M. S. 126 or if you are using a credit card you can register by phone, x5427. Registration forms

Read More

can be found on the web.

Coed volleyball league
Join the coed volleyball league. All levels of play are accepted. The season starts on May 14 and games are held Monday and Tuesday evenings at 5:30 p.m. at the Village sand volleyball courts. If you would like to form a team, rosters are due by May 7. If you are looking for a team to join contact Jenny Thorson by phone at x3470 or by email. Information, schedule, rules, etc. can be found online.

Classifieds
New classified ads have been posted on *Fermilab Today*.

Upcoming Activities