# **‡Fermilab** Today

### Calendar

Friday, April 22

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4:00 p.m. Joint Experimental Theoretical

Physics Seminar - 1 West

Speaker: Y. Kolomensky, University of

California, Berkeley

Title: E158 Results on Parity Violation in

Electron-Electron (Moller) Scattering

### Monday, April 25

2:30 Particle Astrophysics Seminar -

Curia II

Speaker: J. Beatty, Ohio State University

Title: Tuning into Cosmic Rays and

Neutrinos

3:30 DIRECTOR'S COFFEE BREAK -

2nd Flr X-Over

4:00 All Experimenters' Meeting

Special Topic: Electrostatic Separator

R&D - Curia II

#### Weather



Rain 50%32%

**Extended Forecast** 

Weather at Fermilab

#### Current Security Status

Secon Level 3

## Wilson Hall Cafe

# What's Up with the ILC?

The entire International Linear Collider series is available online.

Fermilab, Argonne Team Up On Damping Ring Design Analysis



Argonne National Laboratory (Click on image for larger version.)

The damping ring performs the critical function of cooling the electron and positron bunches in the proposed International Linear Collider, forcing the particles to travel in parallel so they can be focused tightly in the beam line. But how will accelerator scientists know when they've hit on the best design?

Among several groups from the two neighboring labs collaborating on ILC projects, Argonne's Louis Emery and Fermilab's Aimin Xiao have formed a team for lattice design work on the damping ring. The many critical issues for any design damping ring design include beam aperture, bunch length, circumference (the target is 6 km), length of the straight sections, and different configurations (for example, circular and "dog bone"). Emery and Xiao gave a talk Wednesday morning in the weekly ILC seminar series.

# Fermilab's Tree-Planting Activities Cancelled Due to Rain

Fermilab's Earth Day tree-planting activities have been cancelled due to rain. Roads and Grounds will sponsor the tree-planting activity on Monday, April 25. Don't forget to bring a shovel, and wear boots and gloves (and this year, bring your own lunch, too). The area to be planted this year is directly west of Warehouse II. Planting begins at 11:30 a.m. If weather becomes an issue on Monday please call x3303.

more information

#### In the News

# From *Interactions.org*, April 21, 2005

# Is It or Isn't It? Pentaquark Debate Heats Up

New data from the Department of Energy's Jefferson Lab shows the pentaquark doesn't appear in one place it was expected. The result contradicts earlier findings in this same region and adds to the controversy over whether research groups from around the world have caught a glimpse of the so-called pentaquark, a particle built of five quarks.

#### **Announcements**

read more

## Friday, April 22

New England Clam Chowder
Western BBQ Burger \$4.75
Turkey Tetrazzini \$3.75
Meatballs Teriyaki over Rice \$3.75
Bistro Chicken & Provolone Panini \$4.75
Assorted Personal Size Pizzas \$3.25
Carved Top Round of Beef \$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

Fermilab Today is online at: <a href="http://www.fnal.gov/today/">http://www.fnal.gov/today/</a>

Send comments and suggestions to today@fnal.gov

Fermilab Today archive

Fermilab Today PDF Version

Fermilab Result of the Week archive

Fermilab Safety Tip of the Week archive

Linear Collider News archive

Fermilab Today classifieds

Subscribe/Unsubscribe to Fermilab Today

Emery and Xiao have used lattice model generators, and they have also adapted "Multi-Objective Optimizer" software developed at India's Kanpur Genetics Algorithm Laboratory



Louis Emery

(KanGAL), to visualize the tradeoffs in possible damping ring design solutions. The optimizer involves a list of variables and limits, a list of user-supplied constraint functions, and objective functions. "The method is suited to cluster computing," Emery said. "The final result is a distribution of best objective values lying on a multi-dimensional surface, from which the user can select a solution."

Physicist and engineers at Argonne's
Advanced Photon Source are world
leaders in electron storage rings, with
extensive experience in designing
radiation devices called undulators and
wigglers for damping electron and
positron beams. Argonne accelerator
physicists are also working with Fermilab
groups on a chemical processing lab at
Argonne for superconducting RF cavities,
and on a facility to test the performance of
high-gradient RF structures built at
Fermilab.

<u>View slides in PDF format from the Emery</u> and Xiao talk

-Mike Perricone

# **Buffalo Drover Don Hanson Is Heading for New Pastures**

#### **Fermi Singers Perform Today**

The Fermi Singers are back! Mark your calendars for April 22 at noon in the Auditorium. The group will present a Spring Concert for your listening pleasure. Snacks will be available following the performance!

## New Classifieds on Fermilab Today

New <u>classified ads</u> have been posted on Fermilab Today. A permanent link to the classifieds is located in the bottom left corner of Fermilab Today.

#### Lost

Prescription safety glasses lost at ME 7 on Friday, April 15. Black case with gold tone frames. If seen please call x2085.

#### Canoe Rentals

Canoes and car racks can be rented through the Recreation Office, WH15W. Cost is \$7 per day/per canoe and \$5 for the car rack. This includes paddles and life jackets. Transportation of the canoes is the responsibility of the renter, unless a car rack is rented. Canoes are aluminum and 17' in length and have a maximum capacity of 5 people. Canoes are located in the garage between 10 Sauk Circle and Anderson Barn. Reservations and payment must be made prior to use. Canoes are licensed and may be taken off site. Arrangements can be made to pick up the canoes on weekends and after hours, if needed. Onsite canoeing is available on the Village lakes only. These are: DUSAF Pond, A.E. Sea and Lake Law.

#### Spring Book Fair - April 27-28

Fermilab Recreation will sponsor the Spring Book Fair, hosted by Books are Fun, in the Atrium on Wednesday, April



Don Hanson has been Fermilab's buffalo herdsman for more than twenty years.

After nearly 22 years as Fermilab's herdsman, Don Hanson still remembers his first time alone with the buffalo. "I was a cattle farmer, so I thought, 'How different could this be?' " Hanson recalled. "I was young and cocky. Well, I got in there, and it was scary. These were wild animals. I learned you can't trust them. I learned to have a healthy respect for them."

There was a wide sampling of healthy respect expressed for Hanson during his retirement celebration Thursday at Site 37, as one friend and colleague after another attested to his dual gifts for flatout verbal honesty, and for lifting the spirits of those around him. "When I first got here, I asked Don why he didn't get the buffalo out of the cold and into the barn," said Vic Kuchler, Deputy Head of FESS. "Don looked at me patiently and said, 'If you try to put them in the barn, you'll just make them angry.' "

Ellen Lederman, wife of Director Emeritus Leon Lederman, remembered the sign Hanson made for the buffalo pasture fence that was once pictured in "Playboy" magazine: "Can you cross this pasture in 10 seconds? The bull can do it in 9.9." 27 from 10:00 AM until 6:00 PM and on Thursday, April 28 from 7:00 AM until 3:00 PM. A portion of the proceeds from the Book Fair subsidizes some of our Recreation Programs.

**Upcoming Activities** 

more information

Mike Becker, head of Roads and Grounds, said Hanson's wry taciturnity was just the surface. "No matter what was going on in Don's life," Becker said, "he was quick-witted, fun to be around, and he could always say something to make you stand back and laugh."

Following his last day at the lab today after more than 28 years, Hanson and his wife Carol are relocating to a farm in southern Illinois, about 25 miles south of Marion in the Shawnee National Forest region. Hanson said he has no shortage of tasks ahead of him, including continuing to build elegant horse-drawn carriages. "I'd like to stay at the lab," Hanson said, "but I've got too much work to do. I built this herd from 20 head up to 135 at its peak, and now we have 54 or 55. These animals have done well for me. I have friends all over the country because of these animals. Everyone at the lab has treated me well. I have lots of memories."

Associate Director Jed Brown described the buffalo of Fermilab as icons. "They're a symbol of this lab, and they're appreciated far and wide," Brown said. "They're prize animals, always given the best care. We can all be proud. Don-your work has been appreciated far and wide." -Mike Perricone