

Calendar

Thursday, May 13

THERE WILL BE NO THEORETICAL PHYSICS SEMINAR THIS WEEK

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

Friday, May 14

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

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

Speaker: P. Langacker, University of Pennsylvania

Title: From Zero to Z0: A Workshop on Precision Electroweak Physics – Summary Talk

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

Tickets: Adults \$4

Title: Amelie

Wilson Hall Cafe

Thursday, May 13

Tomato Florentine soup

Grilled Chicken Cordon Bleu Sandwich
\$4.75

Peachy Pork Roast \$3.75

Chicken Marsala \$3.75

Maryland Crab Salad \$4.75

Italian Sausage Calzones \$3.75

SW Chicken Salad with Roasted Corn

Salsa \$4.75

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

Weather

Fermilab's Main Injector Wetland Mitigation Project Wins 2003 Conservation and Native Landscaping Award



Bharat Mathur (left) and Elizabeth McCance (right) presented the award to Rod Walton (center). (Click on image for larger version.)

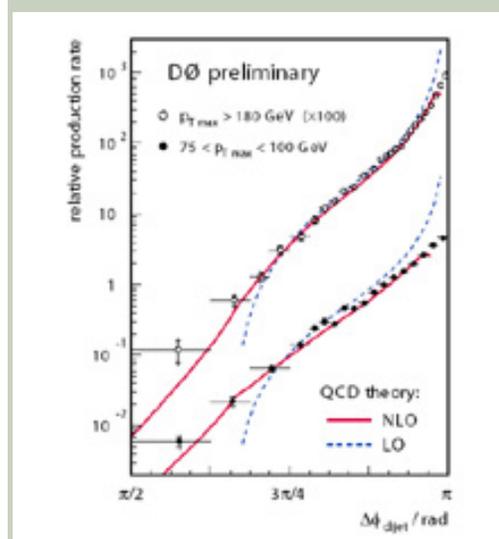
On Tuesday, May 11, 2004, the U.S. Environmental Protection Agency and Chicago Wilderness presented Fermilab with a 2003 Conservation and Native Landscaping Award at a ceremony in Chicago's Jackson Park. Bharat Mathur, Acting Regional Administrator for U.S. EPA Region 5, and Elizabeth McCance, Director of Conservation Programs for Chicago Wilderness, cited Fermilab's achievement in using native plants in the Main Injector Wetland Mitigation Project.

"These awards recognize outstanding examples where people have used native plants to bring beauty and diversity to the areas in which we live," McCance said. "The recipients of today's awards are models for the rest of us. They have changed their sites into thriving natural communities and made them a better place to work and live."

[read more](#)

Fermilab Result of the Week

DZero: Angling in on QCD



The measured distribution of azimuthal angle between the two most energetic jets in proton-antiproton collisions. (Click on image for larger version.)

Quantum Chromodynamics (QCD) is a theory that describes strong interactions among elementary particles. Although it is complete and based on fundamental principles of nature, it is often difficult to apply to specific situations. Nevertheless, comparing approximate calculations from QCD with experiment data offers a way to improve our descriptions of the strong force. For example, when two partons (quark or gluon constituents of protons) smash into one another, they usually emerge back-to-back from the viewpoint of the incoming protons. When additional partons are also produced, QCD predicts how the angle between the two most energetic ones should change.

The signature for outgoing partons corresponds to collimated sprays of particles (remnants of quarks or gluons, referred to as jets) that can be measured through the energy they deposit in the



Thunderstorms Likely **83%/63°**

[Extended Forecast](#)

[Weather at Fermilab](#)

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Fermilab Arts Series Presents Sam Bush

Tickets Still Available!

The Fermilab Arts Series presents the master musician and bluegrass rebel Sam Bush on Saturday, May 15 at 8:00 p.m. in Ramsey Auditorium. Perhaps best known as the founder and driving force behind the legendary New Grass Revival, Bush's ability to make music that exceeds all expectations is evident by listening to his work over the past year. Two diverse



Sam Bush

projects, Bluegrass Mandolin Extravaganza and Short Trip Home, were nominated for Grammy Awards for Best Bluegrass Album and Best Classical Crossover Album, respectively. The Short Trip Home project led to a performance on the national broadcast of the Grammy Awards. He also recently made a guest appearance with Ringo Starr playing "With A Little Help From My Friends."

[read more](#)

Accelerator Update

May 10 - May 12

- Operations established one store that provided approximately 38 hours of luminosity to the experiments.
- The Main Injector suffered from power supply problems

[View the current accelerator update](#)

[View the Tevatron Luminosity Charts](#)

In the News

detector. DZero has studied the angle between the two most energetic jets in proton-antiproton collisions, and finds (see accompanying figure) that the emission of extra partons affects the angle between the most energetic jets exactly as predicted from what is referred to as perturbative QCD (labeled NLO in the figure). This kind of information provides a deeper understanding of QCD, better tools for obtaining more reliable calculations, and thereby more sensitivity for gauging any departures from theory that could signal the presence of new physical phenomena.



(Left to Right) Christophe Royon (DSM/DAPNIA/SPP, CEA Saclay), Alexander Kupco (DSM/DAPNIA/SPP, CEA Saclay, on leave from the Institute of Physics, Center for Particle Physics, Prague), Marek Zielinski (University of Rochester), Markus Wobisch (Fermilab) and Michael Begel (not pictured, from University of Rochester) have been working on this measurement. (Click on image for larger version.)

[Result of the Week Archive](#)

Announcements

Email Alerts for APS Journals

Researchers can now sign up for free Email Alerts for APS Journals, with table of contents listing for each new journal issue. Alerts are sent immediately to the user's email after the complete issue is published online.

[more information](#)

Spring Muscle Toning Class

Do something nice for yourself and join

From the *Oregonian*, May 12, 2004

Spirited greeting primes teens for views, advice of scientists

Students at the science fair spring to their feet at the arrival of eight award-winning researchers

by Richard L. Hill

The spirited teenagers jumped to their feet, clapping and unleashing a fusillade of camera flashes as they spotted their heroes walking on stage Tuesday in the Oregon Convention Center.

Rock stars? No, eight award-winning scientists -- including five Nobel laureates -- who seemed surprised by the spontaneous display of appreciation from the young crowd of about 500.

[read more](#)

the Muscle Toning Classes at the Recreation Facility. The next class will run from May 25 through July 1 on Tuesdays and Thursdays from 5:30 - 6:30 in the Recreation Facility. The cost is \$40.00. The registration deadline is the Friday, May 21. You must be a current member of the facility to participate. You may register in the Recreation Office. If paying by credit card you may register over the phone at x4761 or x2548.

Fermilab Picnic and Cougar Game DEADLINE TO REGISTER FOR THIS EVENT IS MAY 28

The picnic will be held Saturday, July 10 at the Kane County Cougar Stadium beginning at 4 PM. The cost for the event is \$12.00 per person.

[more information](#)