

## Calendar

### Wednesday, August 18

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

BREAK - 2nd Flr X-Over

**4:00 p.m.** Fermilab Colloquium - 1 West

Speaker: D. Wallach, Rice University

Title: The Risks of Electronic Voting

### Thursday, August 19

THERE WILL BE NO THEORETICAL PHYSICS SEMINAR THIS WEEK

**11:45 a.m.** [Third Thursday Lunchtime](#)

[Cleanup](#) - Ground Floor Wilson Hall

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

BREAK - 2nd Flr X-Over

THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

## Wilson Hall Cafe

### Wednesday, August 18

Vegetable Beef soup

Quarter Pound Hot Dog in a Soft Pretzel

Roll \$4.75

Stuffed Peppers \$3.50

Country Fried Steak with Pepper Gravy \$3.75

Beef & Cheddar Panini w/ Sauteed

Onions \$4.75

Assorted Personal Sized Pizzas \$2.75

Cavatappi Pasta with Italian Sausage &

Tomato Ragu \$4.75

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

## Weather

## Fermilab Scientists Present New Physics Results at ICHEP Beijing



Beijing International Convention Center

Scientists from Fermilab are presenting new results from experiments performed at the world's highest-energy particle accelerator during the 32nd International Conference on High Energy Physics in Beijing, China, August 16-22. The physicists from Fermilab and from universities and laboratories around the world traveled to Beijing to present new results from the DZero and CDF experiments.

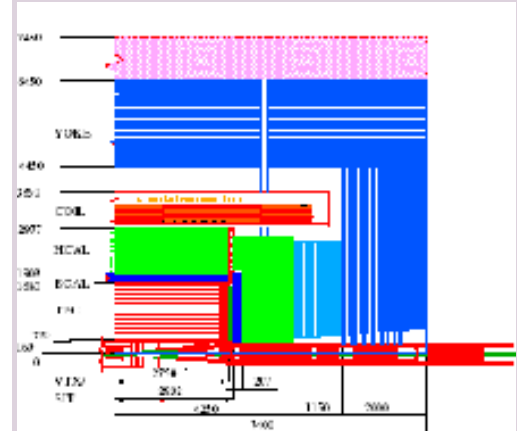
Collider Run II of the Tevatron began in 2001 after the accelerators and the DZero and CDF detectors completed a major upgrade. Physicists from DZero and CDF are presenting new results on a variety of topics using Run II data, including properties of the top quark, W and Z bosons, bottom and charm mesons, and searches for new physics such as the Higgs boson and extra dimensions.

"New, important physics results are coming out of the Tevatron continuously," said Fermilab Director Mike Witherell. "Some of these results using Run II data were presented last week at the Tevatron Connection at Fermilab, and are now

## What's Up with the Linear Collider?

The eleventh in a series of Fermilab Today stories on the International Linear Collider. The entire series is [available online](#).

### Detectors for the Linear Collider



Schematics of the proposed TESLA detector for the Linear Collider (Click on image for larger version.)

The International Linear Collider will produce more powerful electron-positron collisions than any machine in the past. To examine the subatomic physics processes taking place at the core of these collisions, scientists need detectors that can record particle tracks with precision one hundred times better than present-day technology. From large-scale silicon detectors to digital calorimetry, scientists around the world are studying the feasibility of different detector systems.

"The detector challenges are enormous," said University of Chicago physicist Mark Oreglia, co-chair of the American Linear Collider Physics Group. "We need a lot of R&D to meet the requirements. We are behind compared to Europe and Asia. For



Chance Thunderstorms 84°/60°

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being presented at Beijing."

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## Last Chance to Help Keep Fermilab Clean



Priscilla Meldrim (left) and Bob Lootens (right) at a lunchtime cleanup earlier this year. (Click on image for larger version.)

The last lunchtime cleanup for the season will be tomorrow from 11:45 a.m. to 1:30 p.m. Starting in April, large numbers of Fermilab employees and users have volunteered their time once a month, helping pick up trash around the site. "We focus mainly on picking up trash along the roadways and ponds," said Mike Becker of Roads & Grounds. "We had a good turnout this year with 27 volunteers at one of our cleanups." Roads & Grounds provides transportation from the East ground floor of Wilson Hall to the cleanup site, not to mention hot dogs and refreshments. If you would like more information about the lunchtime cleanup, call Roads & Grounds at x3303.

[more information](#)

### In the News

many years the progress in the US has been slow because of the lack of money. In the last two years we got some more funding thanks to the support by the Department of Energy."



ALCPG co-chair Mark Oreglia, University of Chicago

The [ALCPG](#) closely works together with its counterparts in [Asia](#) and [Europe](#). The three regions coordinate their efforts through the International Organizing Committee of the Worldwide Study of Physics and Detectors for Future Linear Electron Positron Colliders. The Committee, known as the Worldwide Study, has established [international working groups](#) that investigate the promises and challenges of individual detector systems.

Responding to a request by the International Linear Collider Steering Committee made in February 2004, the Worldwide Study has drafted a roadmap to establish detector collaborations, to foster detector development, and to produce detector bench marks for Technical Design Reports. At a meeting in Durham at the beginning of September, the Worldwide Study will gather community input on its plan and finalize the report for presentation to the ILCS.

"Receiving both the Worldwide Study report and the ITRP technology recommendation for the Linear Collider, the International Linear Collider Steering Committee should be quite busy this fall," said Oreglia, who is one of the North American representatives of the Worldwide Study.

## From *The Chicago Sun-Times*, August 17, 2004

### Year of the missing monarch

Don't expect to see many Red Admirals, Orange Sulphurs or Painted Ladies darting around grassy lawns or vacant lots.

The colorfully named critters are butterflies commonly found in the Chicago area -- but not so much this summer.

...Many experts and butterfly watchers point to the quirky weather -- hot and dry early this spring, then wet, then cold -- as a likely culprit for the population drop, particularly since the butterflies were abundant last summer.

"We had a rather cool, rainy period in May and June. I think that set them back a little," said Tom Peterson, a butterfly enthusiast who runs a Web site cataloging the butterflies he spots at the Fermi National Accelerator Laboratory, where he works as a mechanical engineer.

[read more](#)

## Announcements

### Wilson Hall Power Outages

On August 28 and 29, Wilson Hall will have power but no air conditioning. Listed below are other proposed dates and times for the upcoming 'shutdown' related power outages that will affect Wilson Hall: September 13 for half an hour starting at approximately 7:00 a.m. September 18 for 8 to 10 hours starting at approximately 7:00 a.m. September 24th for half an hour starting at approximately 7:00 a.m. For more information, contact the Wilson Hall Building Manager, Stan Boyson at x4753.

### UEC Career Night

The Fermilab UEC will be hosting a Career Night on Thursday, September 9 from 7:00 p.m. to 9:00 p.m. in One West. The talks are aimed at graduate students and young physicists, but everybody is welcome. Wine and cheese will be served from 6:00 p.m. to 7:00 p.m. For more information, contact a member of the Organizing Committee: [Ken Bloom](#), [Sharon Hagopian](#), [Lydia Lobo](#), or [Paul Sheldon](#).

### Fermilab Coed Softball League

The regular season is over and the results are:

First Place D-Zero Nuts

Second Place Boomers

Third Place Isotopes

Fourth Place Final Force

Fifth Place Euro Trash

Double elimination playoffs start 8/18/2004

### International Folk Dancing

International Folk Dancing will be held at

7:30 p.m. Thursday, August 19, at the Geneva American Legion Post. Info at 630-584-0825 or 630-840-8194 or [folkdance@fnal.gov](mailto:folkdance@fnal.gov).

**Wilson Hall Interior Window Washing Finishes Tomorrow**

The cleaning crew will finish washing the interior windows in Wilson Hall tomorrow. For questions, contact Enixe Castro at x2798. The windows will be cleaned according to this schedule:

August 17-18: Atrium