

## Calendar

### Monday, July 19

THEORETICAL ASTROPHYSICS SEMINARS WILL RESUME IN THE FALL

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

BREAK - 2nd Flr X-Over

**4:00 p.m.** All Experimenters' Meeting -

Curia II

### Tuesday, July 20

**Noon** Summer Lecture Series - 1 West

Speaker: A. Lennox, Fermilab

Title: Neutrons Against Cancer

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

BREAK - 2nd Flr X-Over

**4:00 p.m.** Accelerator Physics and

Technology Seminar - 1 West

Speaker: K. Bishofberger, University of California, Los Angeles

Title: Using the Tevatron Electron Lens for Tune-Shift Compensation

## Wilson Hall Cafe

### Monday, July 19

French Quarter Gumbo

French Dip w/Horseradish Cream Sauce

\$4.75

Honey Garlic Pork Chop \$3.75

BBQ Roasted Quartered Chicken \$3.75

Italian Panini with Provolone \$4.75

Bacon Cheeseburger Pizza \$2.75

Sweet n/ Sout Chicken with an Egg Roll

\$4.75

[Wilson Hall Cafe Menu](#)

[Chez Leon](#)

## Weather

## Accelerator Division Hits It Out of the Park!



The scene in the Main Control Room a few hours after their home run on Friday afternoon. (Click on image for larger version.)

At 11:53 a.m. Friday, the Tevatron set a new luminosity record of  $1 \times 10^{32} \text{ cm}^{-2} \text{ sec}^{-1}$ .

"We were swinging for a home run," said Run Coordinator Jim Morgan. "We knew we had a pretty good shot at it, so there was a lot of anticipation and excitement, and a lot of people in the control room applauding when we saw the numbers."

The use of the Recycler and Accumulator together helped to set the new record and the previous record of  $9.2 \times 10^{31} \text{ cm}^{-2} \text{ sec}^{-1}$  set on July 6. Since January 2004, the peak luminosity of the Tevatron has increased 100 percent.

"We gradually build up antiprotons in the Recycler. Every four to six stores we add them into the shot, that way we get more luminosity," Morgan said. "More protons and more antiprotons equal more collisions. We've made a lot of progress this year."

## Safety Tip of the Week

### Cumulative Trauma



Rafael Lizama, a sub-contractor for the North American Cable Corporation, installing fiber-optic connectors in the Medical Office. This type of repetitive motion could cause CTD if the proper precautions are not taken. (Click on image for larger version.)

Most injuries occur in an instant.

However, some arise gradually due to an accumulation of small stresses that may take weeks, months or years before symptoms appear. Referred to as Cumulative Trauma Disorder (CTD), these injuries are caused by prolonged muscle tension, repetitive motion, overuse, or incorrect/static posture. Fermilab's workforce is by no means immune to occupational CTDs. Over the past five years, we have had 53 cases or suspected cases: with most affecting the wrist or arm.

Fermilab takes pride in its hard working, committed work force. Paradoxically, an employee's positive attitude of "the job needs to get done" can sometimes lead to making a condition worse. Too often people ignore the discomfort, attempting to work through the pain, until the condition has reached an advanced stage. At that point, prescription drugs,



Partly Cloudy 85°/66°

[Extended Forecast](#)

[Weather at Fermilab](#)

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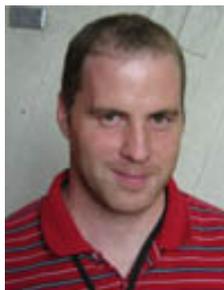
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## Juan Estrada Begins Wilson Fellowship Today

Juan Estrada, who recently finished measuring the top quark's mass for his post-doctorate research at DZero, becomes Fermilab's new Wilson Fellow today. A five year grant, the Wilson Fellowship allows promising young physicists to develop their own research programs for five years after they complete their post-doc work.



Juan Estrada

"Wilson Fellows are Fermilab's future leaders -- the people who will change the lab's direction," said Hugh Montgomery of the Directorate, former head of the Wilson Fellowship committee. "The award usually goes to multi-talented physicists who can do both hardware and software, and who will hopefully end up heading new projects." The Tevatron's performance has been improved by several former fellows, such as Sergei Nagaitsev of RD, whose work on electron cooling has increased luminosity, and Ted Liu of CDF, who helped to design the new detector for Run II.

Estrada helped determine a method of measuring the top quark mass as a PhD student and then implemented it as a post-doc. He will have a month to choose his new research activities. "It's very nice having the opportunity to move to something other than top quark measurements, but I haven't decided yet," he said. "I'll talk with people from different experiments and see how I can contribute, then make my choice."

physical therapy, injections or surgery may be needed.

Dr. Foxen of Fermilab's Medical Department urges workers to be aware of pain patterns that may signal the onset of CTD. Typically, there is a gradual onset of pain, numbness or tingling in the wrist, hand, neck, shoulder or elbow with repeated use. If caught early, CTD's can often be completely reversed with simple and inexpensive measures such as resting the painful part, altering the work station and using over the counter pain medicine or cold packs. If you have pain lasting more than 4-6 weeks, that is not responding to these measures, consider consultation with Dr. Foxen or your personal health care provider.

**Have a great day and let's work safely all week!**

[Safety Tip of the Week Archive](#)

### Announcements

#### Upcoming Classes

July 21 - Accomplishment Report Writing

July 30 - Excel Intermediate

August 3 & 5: HTML Intro, Intro to Web Publishing (two half-days)

August 4 & 11 - Adobe Acrobat 6.0 Prof. (two half-days)

August 4, 12 - Goal Setting

August 5 - Performance Review Workshop

August 10 - Access Intro

August 24 - Word Intro

August 25 - Adobe Acrobat 6.0 Prof. - Forms, Security & Accessibility (one half-day)

August 31 & Sept. 2 - Cascading Style Sheets (two half-days)

Sept. 14 - 16: JavaScript Programming

[more information](#)

## Accelerator Update

### July 14 - July 16

- During this 48 hour period Operations established one store that combined with an existing store provided approximately 43 hours and 15 minutes of luminosity to the experiments.

- TEL problems didn't affect store
- Recycler stashed antiprotons

[View the current accelerator update](#)

[View the Tevatron Luminosity Charts](#)

## In the News

### From the House Committee on Science, July 15, 2004

#### Boehlert Hails Naming of Dr. Rita Colwell to the National Women's Hall of Fame

WASHINGTON, D.C., July 15, 2004 – Science Committee Chairman Sherwood Boehlert (R-NY), today issued the following statement on the announcement that Dr. Rita Colwell, former Director of the National Science Foundation, will be inducted into the National Women's Hall of Fame in Seneca Falls, New York next year:

"Dr. Rita Colwell is one of the preeminent scientists in the United States and is fully deserving of this great honor. Her breakthrough scientific work on the spread of the bacterium *Vibrio cholerae*—the organism that causes the dreaded disease cholera—has been hailed as a key to stopping a disease that continues to kill thousand of people worldwide, particularly young children in the developing world.

[read more](#)

## Free English Classes

NALWO-sponsored free English language classes for beginning and advanced levels are Mondays at the Users Center from 9:30 a.m. to 11:00 a.m.

## Industrial Cooling Water Flushing This Week

Industrial Cooling Water flushing begins this week at Fermilab. The work will begin Monday, July 19, 2004 at 6:00 a.m. and continue through 6:00 p.m., Monday through Friday. You may experience a slight water discoloration. If you have questions or concerns about this maintenance procedure please contact Greg Gilbert at x 6835, cell phone (630) 404-1016 or long range pager (630) 722-7609. Thanks for your patience while we complete this maintenance activity.

## Scottish Country Dancing

Scottish Country Dancing will be held at 7:30 p.m., Tuesday, July 20, at the Geneva American Legion Post. Newcomers are always welcome. Info at 630-840-8194 or [folkdance@fnal.gov](mailto:folkdance@fnal.gov).