

Calendar

Thursday, July 28

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

THERE WILL BE NO ACCELERATOR PHYSICS AND TECHNOLOGY SEMINAR TODAY

6:00 p.m. University of Tevatron Lecture Series - 1 West

Speaker: E. Kolb, Fermilab/University of Chicago

Title: Astro/Cosmology Part II

Friday, July 29

3:30 p.m. DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

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

Speaker: B. Petersen, Stanford Linear Accelerator Center

Title: Charm Physics at BaBar

Weather



Mostly Sunny **82°/57°**

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

[Secou Level 3](#)

Wilson Hall Cafe

ILC This Week

ILC - Global Design Effort The Director's Corner, 7/27

I am often asked where the ILC will be sited. The mere fact that I am asked such a question tells me that some of you think we know more than we are revealing about where the ILC will eventually be located. But I must tell you the simple truth that no one knows where the ILC will be sited! (Period)



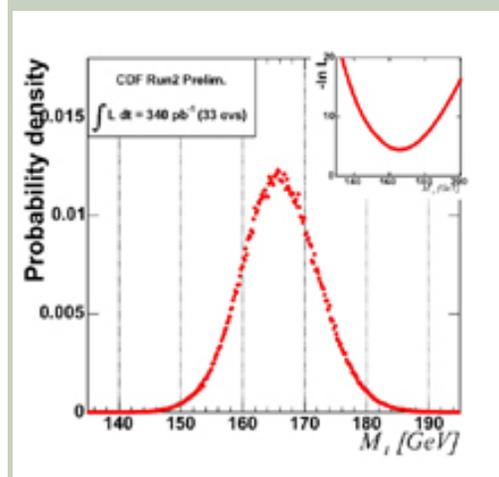
Barry Barish

Alternatively, I am asked how the ILC site will be determined. That is a better question, but unfortunately, I must again give you a disappointingly simple answer that no process has yet been defined. However, we can foresee how to approach that question. Although no details have yet been worked out, it is generally expected that GDE and its parent oversight committees will soon begin to work out how and when "bids to host" will be solicited, what kind of guidelines will be set and how the decision will be made. Clearly, this is a very challenging task. One need only look at the process of making the final site choice for ITER.

I will undoubtedly return to the crucial question of where the ILC will be sited, as the plans for soliciting "bids to host" become clearer, or when some country or region comes forward with an offer. In the meanwhile, it is probably useful for me to outline for you how I envision approaching site issues in the GDE

Fermilab Result of the Week

Top Dileptons Have Mass Appeal



Measured probability for top dilepton mass. (Click on image for larger version.)

The top quark mass, a fundamental parameter of the Standard Model that must be measured experimentally, is of great interest because of its large value and the constraints it places on the Higgs boson mass. At the Tevatron, top quarks are primarily produced in pairs and decay to a W boson and b quark. The "dilepton" channel includes events where both W bosons decay leptonically; it has low statistics but little background contamination. The mass measurement in this channel provides direct confirmation that the observed excess of events is due to the Standard Model top quark; a significant discrepancy compared to measurements in other channels could indicate contributions from new sources.

Thursday, July 28

Tomato Florentine Soup
Grilled Chicken Cordon Bleu Sandwich
\$4.85
Chimichangas \$3.75
Chicken Marsala \$3.75
Smoked Turkey Melt \$4.85
Italian Sausage Calzones \$3.50
SW Chicken Salad with Roasted Corn
Salsa \$4.85

The Wilson Hall Cafe now accepts Visa,
Master Card, Discover and American
Express at Cash Register #1.

[Wilson Hall Cafe Menu](#)

Chez Leon

Lunch

Wednesday, August 3

Tri-Colored Tortellini Salad
Lemon Cheesecake w/Blueberry Sauce

Dinner

Thursday, August 4

Smoked Salmon Plate
Veal Picatta
Spinach Fettuccini w/ Tomatoes & Cream
Chocolate Fondue w/Fruit

[Chez Leon Menu](#)

Call x4512 to make your reservation.

Info

Fermilab Today is online at:
<http://www.fnal.gov/today/>

Send comments and suggestions to
today@fnal.gov

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[Fermilab Result of the Week archive](#)

[Fermilab Safety Tip of the Week archive](#)

process and to mention a few illustrative design questions. It became apparent to me while I was contemplating whether to accept the GDE directorship that to make a realistic design we will need to face up to a set of issues that are site specific, even before we have a site.

[read more](#)

--Barry Barish

[Linear Collider News Archive](#)

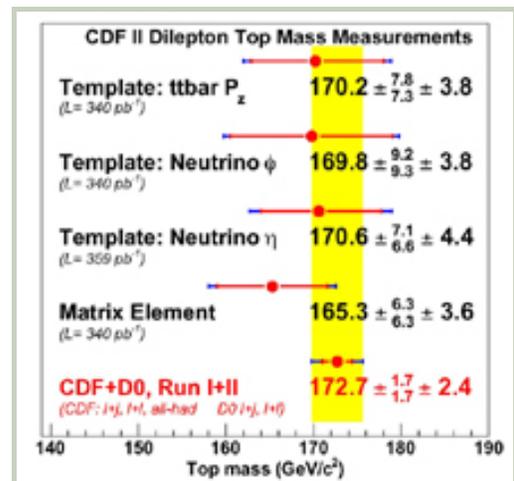
Fermilab Arts Series Presents the World Dance Showcase



The Trinity Irish Dance Company is one of three World Dance groups that will take the stage on August 6 at Fermilab.

Tickets are still available for the World Dance Showcase, presented by the Fermilab Arts Series on August 6 at 8:00 p.m. in Ramsey Auditorium. Three outstanding World Dance groups will take the stage for an evening of Irish, Indian and Ukrainian dance.

The Trinity Irish Dance Company and Trinity II are the world's only nonprofit professional Irish Dance Companies that perform and tour nationally and internationally. A majority of the virtuosic dancers came through the ranks of the prestigious Trinity Academy of Irish dance, and the Chicago/Milwaukee-based school has seized an unprecedented



Summary of CDF top dilepton mass measurement and CDF/D0 combination of best measurements in each channel. (Click on image for larger version.)

Teams of researchers from the US, Canada, Russia, Finland, Taiwan and Slovakia working at CDF have recently completed four new precision top mass measurements in dilepton events. The reconstruction of the top mass in these events poses a particular challenge, as much kinematic information is lost along with the two undetected neutrinos from W decay. Three of the techniques used were developed during Run1 and enhanced for Run II; values for the missing information are chosen from distributions in simulated events and used to calculate a most likely top mass for each event. The fourth measurement represents the first application in dilepton events of matrix element techniques pioneered in the single-lepton channel. This technique assigns a probability for each top mass by combining the probability that the event comes from top pair decay of a given top mass with the probability that the event was produced by known background sources. The result is the most precise measurement of the top quark mass in dilepton events.

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number of gold medals for the U.S. at the annual World Championships of Irish Dance.

The Ukrainian Dance Ensemble Hromovytsia is a talented group of young men and women ranging in age from 15 to 35. The group is known for its unique style of dance, and its wide repertoire draws from various regions of the Ukraine. The choreography displays the grace of classical ballet, bold physical strength and intricate steps that have been created by the choreographer's imagination and influenced by folkloric origins.

Kalapriya Dance portrays mythological stories and poetry through the East Indian Classical dance form of Bharatanatyam. Tales are portrayed through complicated footwork, stylized hand gestures and facial expressions. Kalapriya has performed at the Olympic Games in Salt Lake City, the grand opening for Chicago's Millennium Park, at colleges and universities across the country, and at Dance Chicago.

[more information](#)

Accelerator Update

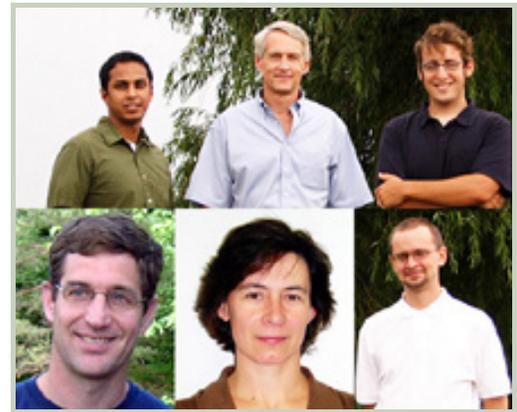
July 25 - July 27

- During this 48 hour period Operations established one store that combined with an existing store provided the experiments with approximately 28 hours and 10 minutes of luminosity.
- MI & Booster repair RF systems
- TeV quench

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

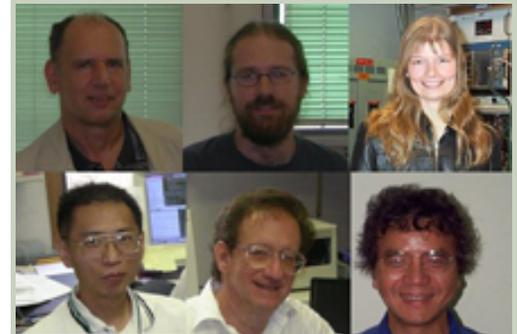
[View the Tevatron Luminosity Charts](#)



Top (Left to Right): Bo Jayatilaka (U. Michigan), Brig Williams, Daniel Whiteson (U. Pennsylvania), Bottom: Dave Gerdes, Monica Tecchio (U. Michigan), Andrew Kovalev (U. Pennsylvania) (Click on image for larger version.)



(Left to Right) Simon Sabik, Pierre Savard, Kostas Kordas (University of Toronto), David Ambrose (Fermilab) (Click on image for larger version.)



Top (Left to right) Jaroslav Antos, Roman Lysak (Institute of Experimental Physics Slovak Academy of Sciences), Tuula Maki (University of Helsinki and Helsinki Institute of Physics), Bottom: Yen-Chu Chen (Academia Sinica), Andy Beretvas, G.P. Yeh (Fermilab) (Click on image for larger version.)



Top: Julian Budagov, Guram Chlachidze, Vladimir Glagolev, Fiodar Prakoshyn (JINR), Bottom: Alexei Sissakian, Igor Suslov (JINR), George Velev (Fermilab), Giorgio Bellettini (INFN and University of Pisa) (Click on image for larger version.)

In the News

From the *Interactions News Wire*, July 27, 2005

Berkeley Lab Press Release:

First Measurement of Geoneutrinos at KamLAND

Results from KamLAND, an underground neutrino detector in central Japan, show that anti-electron neutrinos emanating from the earth, so-called geoneutrinos, can be used as a unique window into the interior of our planet, revealing information that is hidden from other probes.

"This is a significant scientific result," said Stuart Freedman, a nuclear physicist with a joint appointment at the Lawrence Berkeley National Laboratory (Berkeley Lab) and the University of California at Berkeley, who is a co-spokesperson for the U.S. team at KamLAND, along with Giorgio Gratta, a physics professor at Stanford University.

[Read More](#)

[Result of the Week Archive](#)

Announcements

Butterfly Walk This Friday

There will be a butterfly walk this Friday, July 29 at noon. Meet at the Prairie Interpretive Trail parking lot off the Pine Street exit. Ten people is a practical limit, so please contact [Tom Peterson](#) if interested.

Children's Treasure Hunt Party - August 5

This two hour event offers an introduction to the safe use of snorkeling gear and the aquatic environment. The party will be held on August 5 at the Village Pool from 9 AM - 11 AM. The cost for each child is \$20.00. Cost includes an introduction to snorkeling basics, treasure hunt in an artificial reef environment, pirates treasure to keep, use of snorkel gear and a personal snorkel to keep. Children ages 5 to 12 years of age are accepted. Children must know how to swim and be comfortable in the water. Registration deadline is July 29. Maximum of 20 children accepted. Registration can be made in the Recreation Office.

[more information](#)

Fermilab Today Search Engine Temporarily Not Available

Due to technical problems, the *Fermilab Today* search engine is temporarily not available. Thank you for your patience while the problem is being fixed.

[Upcoming Activities](#)