Around the World

Kicking off a new phase



Project managers Ross and Yamamoto during the meeting at KEK. (Photo courtesy of Nobu Toge.)

Since their appointment in May, the three Global Design Effort Project Managers have been busy scheduling and planning the Engineering Design Report kick-off meetings. Since mid-August they have been touring the world for these meetings. Their purpose is, of course, to kick-start the engineering design phase of the International Linear Collider. During one of these recent meetings, from 10-14 September, the members of the ILC community gathered at KEK to discuss conventional facilities and siting, cryomodules and cryogenics. Read more...

-- Rika Takahashi

Calendar

Upcoming meetings, conferences, workshops

ILC Positron Source Collaboration Meeting

Argonne National Laboratory 17-19 September 2007

Workshop on ILC Interaction Region **Engineering Design**

SLAC

17-21 September 2007

EUDET Annual Meeting

Ecole Polytechnique, Paris, France 8-10 October 2007



Fermilab 22-26 October 2007

Feature Story

From SLAC Today: Groovy Project **Solving Cloudy Problem**



Mauro Pivi holds a section of beam pipe with built-in grooves. (Image courtesy of Brad Plummer.)

Experiments in the PEP-II accelerator have shown that beam pipes with grooves can snare unwelcome electrons, greatly reducing the formation of electron clouds that can disturb the beam. Read more...

-- Heather Rock Woods, SLAC Today

Image of the Week

Project managers at work



GDE Project Managers Nick Walker, Akira Yamamoto and Marc Ross (left to right) sneak a peek while taking a tour at DESY.

In the News

Director's Corner

Project X at Fermilab

"What's in a name? That which we call a rose

By any other name would smell as sweet.'

(William Shakespeare (1564-1616), Romeo and Juliet II, ii, 1-2)

seems that the questions I am asked most frequently are not about what gradient we will achieve for the ILC, not who will be the ILC Research Director, the next SLAC Director or the CERN Director General. Instead, I receive both genuine and rhetorical

These days it



In Romeo and Juliet, William Shakespeare dramatised the lack of significance of the actual name given to something.

questions about Fermilab's proposed Project X. People ask me: Why is it being proposed? What is Project X? What are the science goals and opportunities? How will Project X impact the GDE and ILC? What are the technological challenges and issues? And so forth. These represent a very complex set of questions, and I would like to share some of my personal responses to them, not necessarily representing the official views of the GDE.

Read more...

-- Barry Barish

Director's Corner Archive

Announcements

CAREO7 Annual Meeting

CERN

29-31 October 2007

CCAST ILC Accelerator Workshop and 1st Asia ILC R&D Seminar

IHEP, Beijing, China 5-7 November 2007

Upcoming schools

Second International Accelerator School for Linear Colliders

Ettore Majorana Center, Erice (Sicily), Italy

1-10 October 2007

US Particle Accelerator School

UC at Santa Cruz 14-25 January 2008



GDE Meetings calendar

View complete ILC calendar

From Fermilab Today 18 September 2007

ILC Citizens' Task Force tours underground tunnels

Community leaders and media representatives went underground and toured the NuMI tunnel and halls Saturday to get an up close look at how civil engineering and science go hand in hand.

Read more...

From *Physorg.com* 17 September 2007

Argonne physicists create landmark accelerator gradient

...High-energy physicists have begun to realize that they cannot continue their decades-long trend of building ever-larger accelerators, said John Power, a physicist in the AWA group. He sees projects like CERN's Large Hadron Collider, with a circumference of about 17 miles, or the proposed 20-to-25-mile-long International Linear Collider (ILC) as the ceiling for traditional accelerators.

Read more...

From *Fermilab Today* 17 September 2007

Obama representative eyes Fermilab's economic future

...The laboratory has an annual budget of about \$340 million, a figure that would grow if Fermilab was to host the proposed International Linear Collider in the next decade.

Read more...

From *Kane County Chronicle* 16 September 2007

Tunnel vision

...The tourists were members of the International Linear Collider Citizens' Task Force, a group of local officials and lab neighbors trying to see whether a Fermilab tunnel under their homes would work.

Read more...

From *symmetry magazine* August 2007

A lab away from home

Dogs get jet lag. That's what Tor Raubenheimer, a physicist at the Stanford Linear Accelerator Center in California, learned when he moved in 1996 for a one-year fellowship at CERN, the European particle physics lab.

Read more...

Register for ALCPG07

The joint meeting of the American Linear Collider Physics Group and ILC Global Design Effort will take place at Fermilab on 22-26 October. The deadline to register is 12 October. A block of rooms has been reserved at a favourable price for meeting attendees at the Pheasant Run Resort in St. Charles, IL. This block of rooms will only be held until 21 September. Meeting attendees are encouraged to book your rooms soon. Free transporation between the conference hotel and Fermilab will be provided. Questions? Contact Cynthia M.

Sazama.

More information

Questions wanted for dueling pianos

Submit your questions now for the "Dueling Pianos" session scheduled for the evening of 23 October during the ALCPG07 workshop at Fermilab. The session will be a town hall meeting with a twist. Workshop attendees will submit questions ahead of time. Each question will then get forwarded to two attendees, who will be asked to prepare brief responses. Just like dueling pianos sometimes the answers will produce harmony, while other discussions may highlight competing forces. Workshop participants may submit questions online.

ILC-Asia Note

2007-02

Estimation of Transient Lorentz Detuning of ICHIRO Cavity with Helium Jacket

arXiv preprints

<u>709.2859</u>

18 Sep 2007 Simulation Studies and Detector Scenarios for an ILC Polarimeter

709.2837

18 Sep 2007

Resolution Studies of GEM/Timepix Detector with 5 GeV electrons

<u>709.2818</u>

18 Sep 2007

Lepton Flavour Violation at the ILC

709.2683

17 Sep 2007

Test Stand Measurements for an ILC Polarimeter

709.2679

17 Sep 2007

CP Violation in SUSY Particle Production and Decay

From *Nature Magazine* 12 September 2007

Accelerator physics: The plasma revolution

...Many particle physicists think that if the planned International Linear Collider — a US\$7-billion electron—positron collider that could begin operation within a decade — gets the go ahead, it may be the last large accelerator to be built for many decades as governments put a squeeze on funding. (subscription required) Read more...

709.2629

17 Sep 2007

Model-independent WIMP Searches at the ILC

709.2411

15 Sep 2007

The ILC Energy Requirements from the Constraints on New Boson Production at the Tevatron

0709.2359

14 Sep 2007

The Noncommutative Standard Model at the ILC

0709.2311

14 Sep 2007

Two-Loop Electroweak NLL Corrections: from Massless to Massive Fermions

0709.2254

14 Sep 2007

High Resolution Cavity BPM for ILC Final Focal System (IP-BPM)

0709.2248

14 Sep 2007 Update on Ion Studies

0709.2220

14 Sep 2007

Correlation between the Charged Current Interactions of Light and Heavy Majorana Neutrinos

0709.1824

12 Sep 2007

Monte Carlo Simulations for NLO Chargino Production at the ILCs