

### Around the World

#### ILC communication tools put to use

Science cafes as venues for getting the word out



The crowd of more than 100 people had plenty of particle physics questions for Jim Brau at the Science Pub in Eugene, Oregon.

ILC: Gateway to the Quantum Universe? Got it. The September 2007 issue of *NewsLineQ*? Got it. General ILC brochure? Got it. A handful of one pagers to explain how the ILC works? Got it; got it; got it; got it. The ILC scientific community now has a number of communication tools at its fingertips. Handing out brochures is only half the job though. The rest is up to you, the ILC community. We can help you get started, perhaps at your local science café.

[Read more...](#)

-- Elizabeth Clements

### Calendar

#### Upcoming meetings, conferences, workshops

[2007 Nuclear Science Symposium and Medical Imaging Conference](#)  
Honolulu, Hawaii, USA  
27 October - 3 November 2007

[CARE07 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

[ILC EDMS Power User Training](#)  
DESY  
26-30 November 2007

### Feature Story

#### An alternative with many applications



'World-Wide Web of Laser-Compton'

The R&D for an ILC positron source using a laser-compton scheme is ongoing around the world. The efforts in Europe and Asia complement each other. In Europe, scientists are pursuing R&D for the laser path stacking cavity, a complicated, highly sophisticated system with four mirrors. In Asia, scientists aim to accumulate experience in gamma ray generation with simpler cavity structures. They also want to gain experience in installing these cavities into damping rings with high quality beams without degrading its quality. [Read more...](#)

-- Rika Takahashi

### Image of the Week

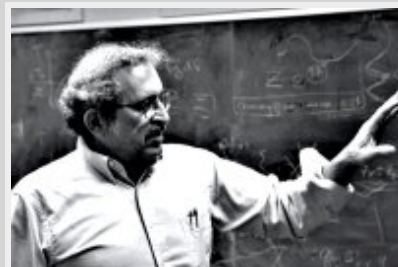
#### Into the vacuum vessel



The final cold mass assembly for the first US-built cryomodule took place at Fermilab last week. The crew assembled the cold mass inside the yellow vacuum vessel, and the alignment group made some adjustments. This week, warm coupler assembly will take place. This cryomodule kit comes from DESY, whose technical staff has provided guidance throughout the entire process.

### Director's Corner

#### Cosmic Dark Matter and the ILC



Michael Peskin doing what he does best -- physics!

A couple of weeks ago, Michael Peskin (SLAC) opened the ALCPG07 meeting at Fermilab with a visionary talk titled, "[The Physics Landscape: Now and Tomorrow](#)." I sat in the audience and wondered what he would do with such a sweeping subject in only 30 minutes. Then Michael flashed his next slide. He revealed the intriguing subtitle, "How will we see the world of physics two years after the first data from the LHC?" This single question zeroed in on precisely what we must consider and anticipate as we develop a design and plans for proposing a linear collider to complement CERN's Large Hadron Collider. Michael continued, not as a prophet but more like a scientist, by describing the likely early science from the LHC and the opportunities it will present for the ILC. [Read more...](#)

-- Barry Barish

### Director's Corner Archive

### Announcements

#### ILC Notes

[2007-033](#)

Readout Inefficiency due to Finite Buffering

[2007-032](#)

Leak rate measurements on bimetallic transition samples for ILC cryomodules

[2007-031](#)

On the Possibility of Adding Boron to the ILC Main Water Dump System

[2007-030](#)

[International Vacuum Symposium, IVS-2007](#)

Homi Bhabha Auditorium, TIFR,  
Colaba, Mumbai, India  
28-30 November 2007  
[Symposium Poster](#), [Symposium Brochure](#)

[Physics at the Terascale Kick-off Workshop](#)

DESY, Hamburg  
3-5 December 2007

[3rd Mini-Workshop on ILC Damping Rings R&D](#)

KEK  
18-20 December 2007

**Upcoming schools**

[US Particle Accelerator School](#)

UC at Santa Cruz  
14-25 January 2008



**= Collaboration-wide Meetings**

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

**In the News**

From *Fermilab Today*  
6 November

**Key Decision**

DOE Under Secretary for Science Dr. Ray Orbach introduced DOE Order 413.3, the Project Management Order, to a broad international audience during the joint meeting of the American Linear Collider Physics Group and the Global Design Effort (ALCPG07) at Fermilab.  
[Read more...](#)

From *Science*  
31 October

**Dark Matter Not a Done Deal?**

Some arguments will never end. A year ago, astronomers reported observations that were widely hailed as proof positive for the existence of dark matter, the mysterious stuff whose gravity holds the galaxies together. But now a different team says that the very same observation can be explained by a controversial theory that rejects dark matter and alters the rules of gravity.  
[Read more...](#)

Radiolysis in the ILC Main Beam Dumps

**arXiv preprints**

[0711.0731](#)

5 Nov 2007

Discovery and Identification of Contactlike Interactions in Fermion-pair Production at ILC

[0711.0695](#)

5 Nov 2007

LHC/ILC interplay for challenging SUSY scenarios

[0711.0488](#)

4 Nov 2007

Holographic Dark Matter and Higgs

[0711.0456](#)

3 Nov 2007

High-Precision Tests of the MSSM with GigaZ

[0711.0364](#)

2 Nov 2007

Discriminating spin through quantum interference