

### Around the World

#### Korea gets ready for the next-generation project



Young UK Sohn explains about Korea's superconducting cavity programme.

"Daegu is exactly a one-hour drive away from Pohang. So I visit Daegu frequently, and vice versa, because people from Kyongpook National University come to Pohang," said Won Namkung, professor at Pohang University of Science and Technology (POSTECH) and Asian Linear Collider Steering Committee chair. These two cities, Daegu and Pohang, are the centres for Korean ILC R&D. Ever since one of the centres, the Pohang Accelerator Laboratory (PAL), a synchrotron light source facility in Korea, organised an [ILC Task Force Team in 2004](#), the members have been working in various fields of study and have already achieved some milestones.

[Read more...](#)

-- Rika Takahashi

### Calendar

#### Upcoming meetings, conferences, workshops

[CHEP 07 - International Conference on Computing in High Energy and Nuclear Physics](#)

Victoria, Canada  
2-7 September 2007

[VII International workshop on Problems of Charged Particle Accelerators: Electron-positron Colliders](#)

JINR-BINP, Alushta (Crimea, Ukraine)  
2-8 September 2007

[TWEPP 2007](#)

### Feature Story

#### Piece by piece

*Fermilab and DESY collaborate to build the first U.S. cryomodule*



Fermilab and DESY technicians work together in the clean room at MP9 to string the first four cavities together.

The 1200 parts started to arrive at Fermilab in June. When fully assembled, these many parts will make up the first cryomodule for International Linear Collider R&D in the United States. The ILC will ultimately require 1680 of these cooled modules that hold the superconducting cavities, maintaining a temperature only two degrees above absolute zero. This first US cryomodule -which will only be used for R&D purposes-represents a special collaboration between Fermilab and DESY.

[Read more...](#)

-- Elizabeth Clements

### Image of the Week

#### Open House

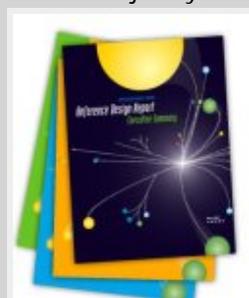


Last Sunday, 2 September, KEK hosted an open house. About 3800 people took part in the scientific fun and attended KEK scientists' lectures, played with scientific toys, and enjoyed facility tours. KEK scientist Nobuhiro Terunuma (above) explained how the Accelerator Test Facility works to open-house attendees.

### Director's Corner

#### The Reference Design Report is now official

We released a draft version of the ILC Reference Design Report last February. Since that time, the accelerator section has undergone reviews by the ILCSC Machine Advisory Committee and by a special international panel for our cost estimates and future plans. In addition, we added some missing sections, improved figures, tables and text. We also worked jointly with the writers of the detector and physics volumes to create one Executive Summary that represents the entire report. The Detector Concept Report went through its own



The four volume set, constituting the ILC Reference Design Report

evolution. The DCR editors posted a draft for comment from the experimental community last spring and incorporated those suggestions. The final product is an attractive and readable four-volume report that we recently submitted to our two oversight committees, the Funding Agencies for Large Colliders (FALC) and the International Linear Collider Steering Committee (ILCSC). They both accepted the RDR, making it official. I am announcing that we are now making it available for [download](#). We are also in the process of printing the report, and you can [submit a request](#) to receive the four-volume set when it is available later this autumn.

[Read more...](#)

-- Barry Barish

[Director's Corner Archive](#)

### Announcements

Prague, Czech Republic  
3-7 Sept 2007

[IEEE EUROCON 2007](#)

Warsaw, Poland  
9-12 Sept 2007

[12th International Workshop on Polarized Sources and Targets \(PST 2007\)](#)

Brookhaven National Laboratory  
10-14 September 2007

[ILC Positron Source Collaboration Meeting](#)

Argonne National Laboratory  
17-19 September 2007

[Workshop on ILC Interaction Region Engineering Design](#)

SLAC  
17-21 September 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 2007



**= Collaboration-wide Meetings**

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

**In the News**

From *CERN Courier*  
September 2007

**KEK achieves first operation of crab cavities**

Crab cavities will also play a role in achieving high luminosity at other machines with a crossing angle, including the proposed International Linear Collider, upgrades of the LHC at CERN, and future synchrotron light sources.

[Read more...](#)

From *Physics World*  
3 September 2007

**Stringscape**

In its near 40-year history, string theory has gone from a theory of hadrons to a theory of everything to, possibly, a theory of nothing.

[Read more...](#)

From *Science Magazine*  
31 August 2007

**Fermilab Proposes Way Station on the Road to the ILC**

Facing an uncertain future, officials at the last dedicated particle physics lab in the United States have developed a backup plan in case their grand ambition to host a gargantuan international collider were seriously delayed.

[Read more...](#)

(subscription required)

**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 for meeting attendees at the Pheasant Run Resort in St. Charles, IL. This block of rooms will only be held until 19 September. Meeting attendees are encouraged to book your rooms soon. Questions? Contact [Cynthia M. Sazama](#).

[More information](#)

**Submit LCWS/ILC07 Proceedings**

The deadline for submission of proceedings contributions is 15 September. Instructions are available [online](#).

**arXiv preprints**

[709.0098](#)

2 Sep 2007

WMAP-Compliant Benchmark Surfaces for MSSM Higgs Bosons

[709.0068](#)

1 Sep 2007

Off-Shell and Interference Effects for SUSY Particle Production

[709.0042](#)

1 Sep 2007

Two Higgs Bi-doublet Left-Right Model With Spontaneous P and CP Violation

[708.4383](#)

31 Aug 2007

ILC Sensitivity on Generic New Physics in Quartic Gauge Couplings

[708.4241](#)

30 Aug 2007

Light Pseudoscalars in Little Higgs Models at the ILC

[708.4233](#)

30 Aug 2007

WHIZARD: Simulating Multi-Particle Processes at LHC and ILC