

Around the World

Important progress on IHEP superconducting cavity



The first 1.3-Gigahertz low-loss type large-grain nine-cell superconducting cavity produced by China. *Image: Nobu Toge*

A 1.3-Gigahertz low-loss type large-grain nine-cell superconducting cavity called IHEP-O1 produced at the Institute of High Energy Physics (IHEP) in Beijing, China, achieved an accelerating gradient of 20 Megavolts per metre in its first vertical test at KEK on 1 July. This may not be the design gradient yet, but it marks an important progress on the research and development of superconducting radio frequency (SRF) technology in China.

[Read more...](#)

-- Min Zhang

BlogLine

19 July - [Katie Yurkewicz](#)
[Sneak peak at Tevatron results for ICHEP](#)

19 July - [Jester](#)
[Expectations for ICHEP](#)

17 July - [Marco Delmastro](#)
[Luminosity is not the whole story](#)

15 July - [Barbara Warmbein](#)
[Less of a rumour, more of a fact](#)

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Calendar

Upcoming meetings, conferences, workshops

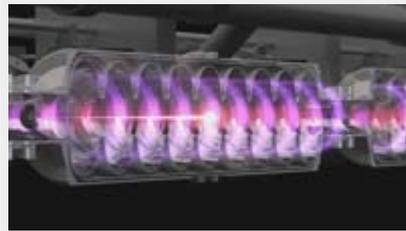
[TeV Particle Astrophysics 2010](#)
Paris, France
19-23 July 2010

[35th International Conference on High Energy Physics \(ICHEP2010\)](#)
Palais des Congrès, Paris, France
22-28 July 2010

[First Baseline Assessment Workshop](#)
KEK, Tsukuba, Japan
7-10 September 2010

Feature Story

The ILC at a glance



Fly through the International Linear Collider and find out how it works with "The ILC in 1 minute" *Image: ILC/Rey.Hori*

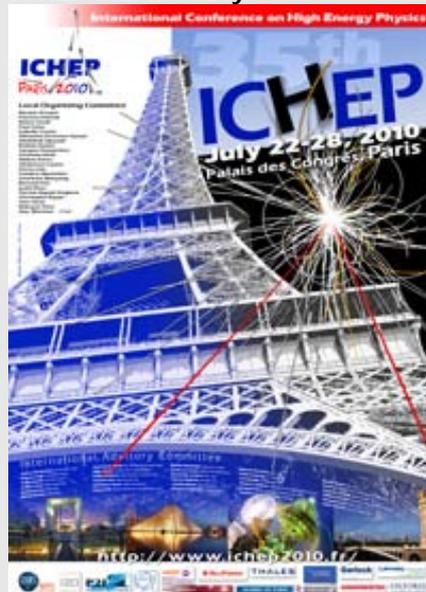
What will the ILC look like? How big is its linear accelerator? How do you describe a collision? If sometimes giving talks you are lost for words, we hope the pictures from our new animation "The ILC in one minute" will help you explain and schematise the ILC operation.

[Read more...](#)

-- Perrine Royole-Degieux

Image of the Week

ICHEP starts today



One of the major conferences in high-energy physics starts today in Paris. ILC sessions are on Saturday, but the rest of the conference promises to be exciting, too! For more info check the [conference website](#) for the [agenda](#) or the [live blogs](#).

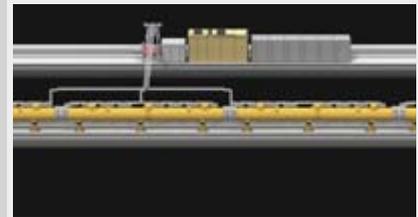
A [live webcast](#) of "salle Maillot" parallel sessions (from 22 to 24 July) and of plenary sessions (from 26 to 28) is available.

In the News

From *World Radio Switzerland*
22 July 2010
Bigger, better Hadron Collider planned
WRS's Pete Forster caught up with

Director's Corner

An animated ILC



Click to watch the new ILC animation.

The old adage that "a picture is worth a thousand words" nicely captures the concept that a complicated story can often more easily be described by a picture than some wordy text. Perhaps in these modern times, we could improve this saying by saying, "an animation is worth more than a thousand pictures." For communicating the International Linear Collider, we have created and use a variety of visual pictures of the ILC, however until now, we have never ventured into using computer animation for our communication needs. Today, we release our first [ILC animation](#), which has been created by Mamoru Horiuchi (aka Rey.Hori) from Japan.

[Read more...](#)

-- Barry Barish

Director's Corner Archive

Announcements

arXiv preprints

[1007.3185](#)

Probing anomalous ZZH and γZH interactions at an e^+e^- linear collider using polarized beams

[1007.3097](#)

Neutral Trilinear Gauge Boson Couplings in Little Higgs Models

[1007.3087](#)

Semi-DHCAL software developments: Digitization and Display

[1007.3077](#)

Status of the Micromegas semi-DHCAL

[1007.3053](#)

Branching ratio study of $ZH \rightarrow q\bar{q}c\bar{c}/q\bar{q}b\bar{b}$

[1007.3019](#)

ILC Beam-Parameters and New Physics

[1007.3009](#)

Test Beam Results Using an RPC Semi-Digital HCAL

[1007.2992](#)

top FCNC physics at a Linear Collider after the LHC

[XXV Linear Accelerator Conference \(LINAC10\)](#)

Tsukuba, Japan
12-17 September 2010

[Topical Workshop on Electronics for Particle Physics \(TWEPP-10\)](#)

Aachen, Germany
20-24 September 2010

[Symposium on the Superconducting Science and Technology of Ingot Niobium](#)

Jefferson Lab, Newport News, USA
22-24 September 2010

Upcoming school

[Fifth CERN-Fermilab Hadron Collider Physics Summer School](#)

Fermilab, Batavia, IL, USA
16-27 August 2010

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

professor Brian Foster, European director of the project, and asked him what the ILC would do that the LHC doesn't.

[Read more...](#)

From *The Sun*
21 July 2010

The biggest bang

The International Linear Collider is an ambitious project to build a 31km-long atom smasher in a straight line. This kind of machine is very different from the LHC, which is a giant circle.

[Read more...](#)

From *Popular Science*
19 July 2010

CERN Physicists To Build Longest-Ever Linear Particle Accelerator

Move over, LHC — the ILC will be 20 miles long

[Read more...](#)

From *The Independent*
18 July 2010

Forget the Large Hadron Collider. All hail Cern's new, straight-line atom smasher

"Part of the report to the Paris conference will be "a blueprint for how you would set up an ILC lab". More than 700 people at 300 laboratories and universities around the world are already working on the accelerator."

[Read more...](#)

From *symmetry breaking*
16 July 2010

The long road to high-intensity LHC collisions

It's getting more intense under France and Switzerland. Over the last few months the Large Hadron Collider has been quietly increasing the power of its two counter-rotating beams of protons, and serving up more and more particle collisions to the experiments dotted around the 27-kilometer ring.

[Read more...](#)

[1007.2748](#)

Model independent WIMP Searches in full Simulation of the ILD Detector

[1007.2636](#)

Identification of new physics and general WIMP search at the ILC

[1007.2634](#)

Development of Fast and High Precision CMOS Pixel Sensors for an ILC Vertex Detector

[1007.2553](#)

Scintillator-Based Electromagnetic Calorimeter Prototype and Beam Test Results at FNAL

[1007.2522](#)

Test Beams Summary

[1007.2471](#)

R&D Status and Plan for FPCCD VTX

[1007.2440](#)

Influence of beam related background on ILD reconstruction

[1007.2358](#)

CALICE Second Generation AHCAL Developments