

Around the World

Subcommittee of Japan Society of Civil Engineers to Promote the ILC



Nine members of the Linear Collider Subcommittee of Japan Society of Civil Engineers met with the ILC representatives of KEK and the University of Tokyo on 8 August.

Members of the Japan Society of Civil Engineers (JSCE) met with ILC physicists at KEK on 8 August, during a meeting of the Committee Board of Technical Committee on Civil Engineering Issues for the Linear Collider Project, or "LC subcommittee".

"Our society addresses the technical and engineering challenges of large-scale civil engineering," says Professor Norikazu Shimizu of Yamaguchi University, the subcommittee chair. "We have a lot of interest in the many kinds of challenges for building the ILC. This meeting is really useful to get a precise description of the project by having a frank and face-to-face discussion."

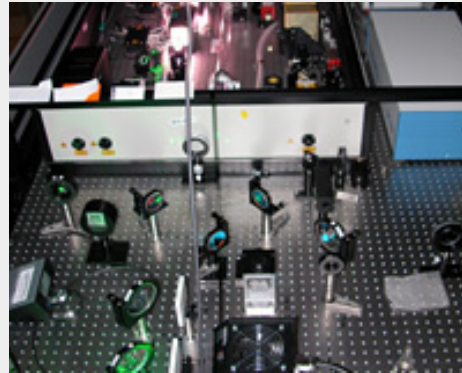
[Read more...](#)

-- Nobuko Kobayashi

Calendar

Feature Story

Getting Wired for Beam Diagnostics



The laser for the laser wire in the ATF extraction line.

Luminosity is the ILC's magical word. The higher it is, the better the collisions, the better the results, the higher the chance to find the answer to some of the open questions the ILC community hopes to answer. The particle beams need to be long and thin, and the scientists have to know exactly what they looked like before they collided with their counterparts: if they know what went in, they can understand what comes out. The laser wire system, led by a team of universities in the UK, measures the beam size and its location and thus helps to know just what 'went in'. [Read more...](#)

-- Barbara Warmbein

Image of the Week

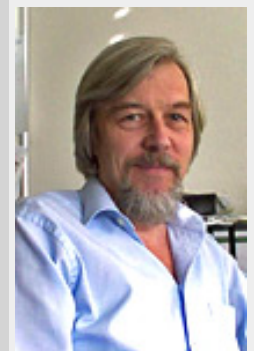


Federal President of Germany Horst Köhler (center) signing the DESY

Director's Corner

Revisiting the ILC Parameters

An innocent looking little document entitled "[Parameters for the Linear Collider](#)" dated 30 September 2003 has to a large extent determined the present baseline design of the ILC. We have used this document as if it were "a



Rolf-Dieter Heuer, chair of the ILCSC Linear Collider Parameters Subcommittee

requirements document," and the baseline design has flowed down from those requirements. Of course, that document was never intended to play such a critical role, and now that we are entering a period in which we want to optimise cost to performance, we must both understand how the parameters effect cost and how they affect performance (or science potential). For this reason, the International Linear Collider Steering Committee ([ILCSC](#)) has recently taken the step to reactivate its parameter group, which will provide us the necessary partner in doing this optimisation, first for the ILC reference design and later for our engineering design. [Read more...](#)

-- Barry Barish

[Director's Corner Archive](#)

Announcements

Upcoming meetings, conferences, workshops

[2006 Linear Accelerator Conference](#)

Knoxville, Tennessee, USA
21-25 August 2006

[Linear Collider Physics School 2006](#)

Ambleside, UK
14-19 September 2006

[TTC Meeting \(Tesla Technology Collaboration\)](#)

KEK ([Information on schedule and logistics](#))
25-28 September 2006

[9th International Workshop on Accelerator Alignment](#)

Stanford Linear Accelerator Center
25-29 September 2006

[ILC Damping Rings R&D Workshop - ILCDR06](#)

Cornell University
26-28 September 2006

[The 17th International Spin Physics Symposium \(Spin 2006\)](#)

Kyoto, Japan
2-7 October 2006

[The International Workshop on Thin Films](#)

Legnaro, Padua (ITALY)
9-12 October 2006

[EUNET Annual Meeting 2006](#)

MPI Munich
18-20 October 2006

[Single Crystal Niobium Technology Workshop \(pdf\)](#)

Araxá mine in Brazil
30 October - 1 November 2006
[Tentative Program](#) (pdf)
[Request Information](#) (email)

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[GDE Meetings Calendar](#)

guestbook during his visit yesterday morning, with (left to right) First Mayor of Hamburg Ole von Beust, DESY Director Albrecht Wagner and Professor Jürgen Mlynek, President of the Helmholtz Association looking on. (Read the [press release](#))

In the News

From *NewScientist.com*
26 August 2006

Upcoming colliders: Physics on the edge

Forget those messy atom smashers - a precision instrument is what's needed to discover the secrets of the universe.

[Read more...](#)

(subscription required)

From *Interactions.org*
21 August 2006

DARK MATTER OBSERVED: Most Direct Measurement of Dark Matter Allows Study of its Nature

Dark matter, the illusive stuff that makes up a quarter of the universe, has been seen in isolation for the first time.

[Read more...](#)

From *BBC News*
21 August 2006

Team finds 'proof' of dark matter

US astronomers say they have found the first direct evidence for the mysterious stuff called dark matter.

[Read more...](#)

From *Science Magazine*
21 August 2006

Dark Matter Exposed?

A smoking bullet clinches the case for dark matter in galactic clusters, NASA announced today.

[Read more...](#)

ILC-Related Preprints

[hep-ph/0608112](#)

10 Aug 2006
Associated single photons and doubly charged scalar at linear e-e- colliders

[hep-ph/0608110](#)

10 Aug 2006
Identifying new physics contributions in the Higgs sector at linear e+e- colliders

[hep-ph/0608076](#)

7 Aug 2006
Measuring the Running of the Electromagnetic Coupling Alpha in Small Angle Bhabha Scattering

[physics/0608065](#)

6 Aug 2006
The charged beam dumps for the international linear collider

[hep-ex/0608038](#)

14 Aug 2006
Review of Recent and Future Needs in Hadronic Flavor Particle Production Measurements

[SLAC-PUB-12044](#)

11 August 2006
Spin Rotation and Energy Compression in the ILC Linac-to-Ring Positron Beamline

[hep-ph/0608027](#)

3 Aug 2006
Bootstrapping One-Loop QCD Amplitudes

[hep-ph/0607333](#)

31 Jul 2006
Dimension-six top-Higgs interaction and its effect in collider phenomenology

[See all preprints...](#)