

Feature Story

Virtually There - The Control Room of the Future?



A real team working on virtual revolutions: the GANMVL collaboration at a workshop at DESY.

Imagine the ILC is up and running. Electrons and positrons collide happily and scientists are taking data. Suddenly there's a problem with one of the laser wires. All experts are at a meeting on a different continent, but the problem needs to be fixed immediately. Difficult? Not when there's a Multipurpose Virtual Lab in place. High-speed, high-resolution cameras would allow the faraway experts to look at the fault, a web-based portal would let them access the controls and tools of the system with a simple "single-sign-on" procedure. And if you think this is far-fetched, think again: the first prototype was tested during the last week of August. And it works!

[Read more...](#)

-- Barbara Warmbein

Calendar

Feature Story

Linear Collider Forum of Japan Meets



Takashi Kato reporting on his visit to the Gotthard-Basistunnel.

[The Linear Collider Forum of Japan](#) is a joint group of physicists, engineers and industry. Their objectives are to explore the technical, economical and political aspects of the International Linear Collider as an international endeavour, to study the roles of the academic and industrial sector, make recommendations for research and development and to develop a feasible scenario for building the ILC. They also study the regional infrastructure, which is necessary to host the ILC and make recommendations for operating an international research institute. They hold meetings twice a year, and 84 people attended the meeting on 11 September at Gakushikai Annex, near the University of Tokyo.

[Read more...](#)

-- Youhei Morita

Around the World

Director's Corner

Machine Advisory Committee Reviews the GDE

The Machine Advisory Committee (MAC) reviewed the GDE for the second time last week at KEK in Japan from 20 to 22 September. The MAC, appointed by the International Linear Collider Steering Committee, is made up of an experienced international group of accelerator experts. The [first review](#) was held at Fermilab last spring and served to introduce the committee to the GDE. This time, the review looked more deeply into specific areas of our efforts. Today, I highlight some of the key observations and recommendations of the committee, based on what we were told during the closeout session for this review. The complete report should be issued within a few weeks.

[Read more...](#)

-- Barry Barish

[Director's Corner Archive](#)

Announcements



Nobel Laureate Burt Richter, a prominent MAC member

Upcoming meetings, conferences, workshops

[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

[ILC Positron Source Meeting](#)

Rutherford Appleton Laboratory
27-29 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

[LCFOA Fall 2006 Membership Meeting](#)

Argonne, IL and Batavia, IL
16-17 October 2006

[EUDET 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 \(email\)](#)

EUROTeV meeting
8- 9 January 2007
Daresbury Laboratory, UK

MAC meeting
10-12 January 2007
Daresbury Laboratory, UK

From SLAC Today: Experimental Work at SLAC Brings RF Design Effort to Life



Richard Swent

Rich Swent parts the thick plastic strips hanging from the doorframe and enters End Station B. He heads through the cavernous room, past spools of cables and under foot-thick cooling pipes, coming to a stop at a table. Currently cluttered with squirt bottles and tools, the aluminum surface will soon serve as the test stand for cutting-edge components made by SLAC for the International Linear Collider (ILC).

End Station B these days is the site of the largest ILC R&D effort at SLAC, the development of the L-band (1.3 GHz) radio frequency (RF) power source. This includes everything between the wall plug and the superconducting RF cavities: the modulators, klystrons, RF distribution, and fundamental mode couplers.

Chris Adolphsen is the scientific leader of this critical R&D effort. Chris has led the development of high power RF systems for the last decade, working first on the X-band normal conducting design and, more recently, on the L-band superconducting design.

[Read more...](#)

-- Krista Zala
SLAC Today, September 20, 2006

Register for ILC-Valencia '06

ILC-ECFA and the GDE will host a joint meeting in Valencia, Spain on 6-10 November 2006. The registration deadline is on 6 October.

[To register...](#)

ILC-Related Preprints

[hep-ph/0609247](#)

25 Sep 2006

Effects of the lightest Higgs model with T-parity on Higgs boson production at high energy $e^+ e^-$ colliders

[hep-ph/0609208](#)

22 Sep 2006

Higgs boson pair production process $e^+ e^- \rightarrow ZHH$ in the lightest Higgs model at the ILC

[SLAC-PUB-12116](#)

Sep 2006

Undulator Background in the Final Focus Test Beam Experiment with Polarized Positrons

In the News

From *the American Institute of Physics*
25 September 2006

Responses to Survey of Women in Physics

"A 2005 survey of women working in physics around the world found that most would choose a physics career all over again..."

[Read more...](#)

From *The University of Chicago Chronicle*

25 September 2006

Physicists on faculty support ILC construction

"Two beams of subatomic particles, each measuring far less than the diameter of a human hair, travel at the speed of light from opposite ends of an 18-plus-miles-long track. In precise alignment, they smash head-on into each other..."

[View Full Calendar...](#)

[GDE Meetings Calendar](#)

Berkeley Lab Press Release

25 September 2006

From Zero to a Billion Electron Volts in 3.3 Centimeters

Highest Energies Yet From Laser Wakefield Acceleration

"..scientists at the Department of Energy's Lawrence Berkeley National Laboratory, working with colleagues at the University of Oxford, have accelerated electron beams to energies exceeding a billion electron volts (1 GeV) in a distance of just 3.3 centimeters..."

[Read more...](#)