

Feature Story

R&D panel reviews calorimetry R&D for ILC detectors



The Calorimetry Review Panel also inspected calorimeter R&D results at DESY.

The calorimeters for the ILC detectors have to show excellent performance if researchers want to fully exploit the physics potential of the ILC. Many processes that are unique for the physics programme of the ILC are characterised by multiple-jet production that can be reconstructed by new calorimetry techniques to very high energies with unprecedented precision. The goal is to improve the jet energy resolution already achieved by a factor of two to fulfil the physics requirements the best possible way. Hence we need to develop these novel technologies and show that they work by 'proof of principle'.

[Read more...](#)

-- Wolfgang Lohmann, DESY Zeuthen (Chair of the Calorimetry Review Panel)

Calendar

Upcoming meetings, conferences, workshops

[US ILC Detector R&D Review](#)
Argonne National Laboratory
19-20 June 2007

[Photon 2007](#)
Paris, France
9-13 July 2007

[2007 Cryogenic Engineering Conference and International Cryogenic Materials Conference](#)
Chattanooga Convention Center

Around the World

FJPLP Workshop: Building the bridge to the future basic science



Participants at the FJPLP workshop

The particle physics world has long been exchanging researchers internationally. One of the reasons for this active exchange is particle physicists share a common interest in the universal questions: How did the universe begin? What are the origins of mass? In addition, as the scale of accelerator facilities grows larger, it becomes difficult for each country to build and maintain their number of accelerators that are each suited for different purposes. This reality pushes researchers to travel abroad, wherever the accelerators are available.

[Read more...](#)

-- Rika Takahashi

In the News

From *Fermilab Today*
12 June 2007

Director's Corner - DESY

A little over a week ago, the combined ILC GDE and ILC World Wide Study took place at DESY.

[Read more...](#)

From *FYI: AIP Bulletin of Science Policy News*
12 June 2007

House Appropriations Committee Backs Full FY 2008 DOE Science Request

...The Committee supports the requested increase in research and development activities, from \$30,000,000 to \$60,000,000, to prepare for the International Linear Collider (ILC), including detailed studies of possible U.S. sites for the ILC.

[Read more...](#)

Director's Corner

A technically driven timeline for the ILC



A technically driven timeline for the ILC

Last week, I made a presentation at Fermilab's 40th Annual Users Meeting where I focused on the GDE's technically driven timeline for the ILC. Following Ray Orbach's statement that the ILC completion will likely be delayed until 2025 or later, Fermilab has undertaken a study to develop a strategic plan for the laboratory that takes into account a possible stretched out schedule for the ILC. Young-Kee Kim, deputy director of Fermilab, is leading the study with a goal of producing recommendations later this summer. In the context of this study, I decided it was important for me to lay out the basis of our GDE project [timeline](#).

[Read more...](#)

-- Barry Barish

[Director's Corner Archive](#)

Announcements

Der Internationale Linearcollider



Chattanooga, Tennessee USA
16-20 July 2007

[Toward the ILC: A Fermilab
Community School on R&D
Challenges and Opportunities](#)
Fermilab
25 - 27 July 2007

[2007 SLAC Summer Institute](#)
Stanford Linear Accelerator Center
30 July - 10 August 2007

 = Collaboration-wide
Meetings

[GDE Meetings Calendar](#)

From *PhysicsWeb*
June 2007

Sounds out the Big Bang

Gravitational waves offer a unique way of studying inflation and other fundamental processes of the very early universe, explains Craig J Hogan, and may even connect string theory with the world of experiment.
[Read more...](#)

From *Fermilab Today*
8 June 2007

Strong Fermilab future essential for US particle physics

"We have the responsibility to assure that the US particle physics program stays healthy," DOE's Robin Staffin, Associate Director for High Energy Physics told Fermilab users, even with a stretched-out schedule for the proposed International Linear Collider.
[Read more...](#)

From *Fermilab Today*
8 June 2007

Policymakers share view on LHC, ILC and budgets

...Kathryn Beers, of the Office of Science and Technology Policy, spoke about the need for interagency cooperation among DOE, NSF and NASA, as well as for international planning "as we see for the ILC and ITER."
[Read more...](#)

From *New Scientist*
5 June 2007

World's biggest particle collider is delayed again

Particle physicists seeking to uncover the secrets of the universe will have a little longer to wait after the CERN laboratory in Switzerland confirmed a delay in the start-up of the Large Hadron Collider (LHC) - the world's most powerful particle accelerator.
[Read more...](#)

If you think you've seen this before, look again: it's not in English! The German version of the ILC brochure is now available. [Order your copy now](#) if you want to know more about Ratsel des Universums!

arXiv preprints

[0706.1358](#)

11 Jun 2007

The effects of the little Higgs models on $t\bar{t}h^0$ production via $\gamma\gamma$ collision at linear colliders

[0706.0948](#)

7 Jun 2007

TeV scale model for neutrino masses, dark matter and leptogenesis