

Research Director's Report

Optimising the value of the ILC
This month's Research Director's Report was written by Jim Brau, co-chair of the Worldwide Study and regional detector contact for the Americas.



During the 2006 Valencia Linear Collider Workshop, the Parameters Committee updated the 2003 ILC Parameters Document. The welcome cocktail in the La Nau de la Universitat provided an opportunity to discuss this and other ILC developments.

Several years ago (in 2003), the parameters for the linear collider were defined by the ILCSC Parameters Committee chaired by Rolf Heuer. The Committee updated the parameters in 2006. In their [2006 report](#) based on the physics potential that served as a baseline to convince the worldwide community that the next facility should be a 500 GeV to 1 TeV electron-positron linear collider, the Parameters Committee listed the required parameters for the "Baseline Machine", in order of priority (paraphrased here): [Read more...](#)

-- Jim Brau

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Calendar

Upcoming meetings, conferences, workshops

[ILD Workshop 2010](#)
 Paris, France

Around the World

From Brookhaven Lab: Brookhaven Lab, Advanced Energy Systems Open Hi-Tech Production Facility



Advanced Energy Systems produces superconducting radiofrequency cavities for use in particle accelerators around the world.

MEDFORD, NY — Today, the U.S. Department of Energy's (DOE) Brookhaven National Laboratory and Advanced Energy Systems, Inc. of Medford, N.Y. (AES) celebrated the opening of a new hi-tech facility at the AES site that will produce crucial components used in particle accelerators around the world. Brookhaven Science Associates, which manages Brookhaven Lab for DOE, purchased equipment worth approximately \$2 million as its contribution to the facility. AES invested in the infrastructure improvements it needed to expand its operations, assisted by a \$200,000 grant from the Empire State Development Corporation. [Read more...](#)

In the News

From *Hindustan Times*
 20 January 2010
CERN chief wants more Indians to take lead in designing, building collider

Indian scientists will be part of the next international basic science experiment right from the design stage. The next generation accelerator, the International Linear Collider (ILC), will have a global design involving scientists from the US, Europe and Asia, said Rolf Dieter Heuer, director general of the European Organisation for Nuclear Research (CERN) on Tuesday. [Read more...](#)

From *Indian Express*
 20 January 2010
World will unite for gadget to

Director's Corner

Accelerator Advisory Panel meeting in snowy Oxford



Oxford University during the AAP review in an unusual, but beautiful, display of winter
 (Image: Nobu Toge)

Last week I introduced a set of ILC baseline changes, the "[SB2009 Proposal Document](#)," proposed through the Global Design Effort project managers. I also mentioned that the first step in evaluating this proposal was an in-depth review held in Oxford, UK, just after the New Year. The Accelerator Advisory Panel (AAP) is a panel of technical and project experts that advises me on technical, R&D and management issues. It will be a couple of more weeks before I receive their detailed report, but in anticipation, I briefly report some highlights based on their comments to me and their presentation at the closeout session. Some emphasis may be different when the final report is received. [Read more...](#)

-- Barry Barish

[Director's Corner Archive](#)

Announcements

Riding the long bunch train

Calling all accelerator experts and technical experts from FLASH and the XFEL, especially those connected with the 9mA studies! There will be a workshop on linac operation with long bunch trains at DESY from 22 to 24 February.

27-30 January 2010



[International Linear Collider Workshop 2010 \(LCWS10 and ILC10\)](#)
Institute of High Energy Physics,
Beijing, China
26-30 March 2010

Upcoming school

[The US Particle Accelerator School sponsored by the UC Santa Cruz](#)
Santa Cruz, CA, USA
18-29 January 2010



= **Collaboration-wide Meetings**

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

replicate its birth, says top particle physicist

The International Linear Collider (ILC), which will aim to reproduce the conditions that led to the Big Bang, will be a global project. The ILC is the next biggest experiment in particle physics after the Large Hadron Collider (LHC) at CERN (European Organisation for Nuclear Research).

[Read more...](#)

From *Technology Review*
18 January 2010

Deriving the Properties of the Universe

The properties of the universe can be derived by thinking about the origin of complexity, says a new theory

[Read more...](#)

From *Physics Today*
14 January 2010

Fermilab and KEK work on the International Linear Collider

Symmetry breaking: A Fermilab shipment of cavities to the Japanese laboratory KEK marks a major milestone in the advancement of US particle accelerator technology and the development of the proposed International Linear Collider (ILC).

[Read more...](#)

[More information and registration.](#)