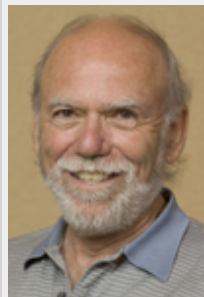


### Around the World

#### Director's Update: STFC Report



Barry Barish

Earlier this week on 11 December, the UK's Science and Technology Facilities Council (STFC) announced funding cuts in a number of their physics and astronomy programmes. To my

disappointment, the International Linear Collider is one of these programmes. The [STFC report](#) states: "We will cease investment in the International Linear Collider. We do not see a practicable path towards the realisation of this facility as currently conceived on a reasonable timescale."

[Read more...](#)

-- Barry Barish

### Calendar

#### Upcoming meetings, conferences, workshops

##### [Wake Fest 07](#)

SLAC  
11-13 December 2007

##### [LET Beam Dynamics Workshop](#)

SLAC  
11-13 December 2007

##### [3rd Mini-Workshop on ILC Damping Rings R&D](#)

KEK  
18-20 December 2007

##### [Fifth ATF2 Project Meeting](#)

KEK  
19-21 December 2007

##### [ILD Workshop](#)

DESY, Zeuthen, Germany  
14-16 January 2008

##### [Tesla Technology Collaboration](#)

[Meeting](#)  
DESY, Hamburg

### Feature Story

#### Value engineering begins



Metal or plastic? Value engineering will help determine what kind of cooling water pipes are best for the ILC. (Photo: Fermilab)

I have three different routes to choose from when I drive to work in the morning. The first one is the interstate. It's fast theoretically, but traffic and tolls can turn my 15 minute commute into 45 minutes. Back roads are another option, but the constant stop and go from traffic lights drain my gas tank. The scenic route is my third option and usually the one that I choose. This route goes slightly out of the way, but there is no traffic, tolls or stoplights. So I can drive at a relatively constant fast speed, and the rolling hills and farms along the way are relaxing. Every morning when I get into my car (usually 15 minutes later than I would like), I weigh the pros and cons and select one of these routes. Rick Lambert from the U.S. Army Corps of Engineers will tell you that this is a form of value engineering, and it is one way that the Global Design Effort will find ways to reduce costs for the proposed International Linear Collider.

[Read more...](#)

-- Elizabeth Clements

### In the News

### Director's Corner

#### A more integrated approach toward an energy frontier lepton collider



CLIC Two Beam Linear Accelerator Concept

All of particle physics is poised for the impending first explorations of the trillion-electronvolt (TeV) energy scale at CERN's Large Hadron Collider. Within the next couple of years, the LHC will lead the way in opening up this new frontier for particle physics. The early results should help us determine what is required of a complementary lepton collider, in order to best address the new physics. The combination of the two explorers, as we have seen in past generations of colliders, will enable us to fully exploit the science of this new energy regime. Based on a great deal of information from both theory and experiment, we have very good reason to expect that a 500 billion-electronvolt (GeV) electron-positron collider, upgradeable to 1 TeV, will be the right match. This has given us strong motivation to develop the design for a collider like the ILC. Nevertheless, we must be prepared for what to do if LHC discoveries point strongly to the need for higher energies, maybe a multi-TeV lepton collider?

[Read more...](#)

-- Barry Barish

#### [Director's Corner Archive](#)

### Image of the Week

14-17 January 2008

#### [SiD Workshop](#)

SLAC

28-30 January 2008



TILCO8

[Joint ACFA Physics and Detector Workshop and \(GDE meeting\) on International Linear Collider](#)

Sendai

3-6 March 2008

#### Upcoming schools

[US Particle Accelerator School](#)

UC at Santa Cruz

14-25 January 2008



= Collaboration-wide Meetings

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

From *Guardian Unlimited*

12 December 2007

#### Science council struggles with cuts

The Science and Technology Facilities Council (STFC) has detailed drastic cuts across a range of research programmes in particle physics, astronomy and astrophysics as it struggles to cope with an £80m shortfall in its budget.

[Read more...](#)

From *Science*

11 December 2007

#### Lean Days Ahead for U.K. Physical Science

Particle physicists and astronomers in the United Kingdom learned today that their grants and programs face dramatic cuts due to an £80 million shortfall at their primary funding agency, the Science and Technology Facilities Council (STFC).

[Read more...](#)

From *Nature*

11 December 2007

#### Physics and astronomy research face "catastrophic" cuts

Physicists and astronomers in the United Kingdom are expressing shock at a plan to slash their budgets and end involvement in a number of programmes.

[Read more...](#)

From *Physics World*

11 December 2007

#### UK pulls out of plans for ILC

A funding crisis at one of the UK's leading research councils has forced the country to pull out of plans for the International Linear Collider (ILC).

[Read more...](#)

From *Interactions.org*

11 December 2007

#### STFC Delivery Plan

The Science and Technology Facilities Council's Delivery Plan for the period 2008/9 to 2011/12 is now available online.

[Read more...](#)

From *Today at Berkeley Lab*

6 December 2007

#### A New Kind of Particle Detector Using Silicon-on-Insulator Chips

Marco Battaglia of Berkeley Lab's Physics Division and UC Berkeley's Department of Physics heads the Lab's program to develop a vertex detector for the proposed International Linear Collider (ILC), in collaboration with partners at the University of Padua and the University of Turin.

[Read more...](#)

#### STF update



Working area for the new superconducting cavity vertical testing facility under preparation in the STF building at KEK. (Photo: Nobu Toge, KEK)

#### Announcements

##### Tell us what you think

Do you have an opinion or reaction to an article in today's issue of *NewsLine*? Tell us what you think, and we will publish your letter in our new "Readers Write" column. [Email your communicators](#) now.

##### ILC Notes

[2007-036](#)

Pair Production of Scalar Top Quarks in Polarized Photon-Photon Collisions at ILC

[2007-035](#)

Main Linac RF Power Distribution System Heat Load for the ILC Reference Design

[2007-034](#)

ESA Beam Optics Measurements and Tuning During 2007 Beam Tests

##### arXiv preprints

[0710.2602](#)

Prospects to Measure the Higgs Boson Mass and Cross Section in  $ee \rightarrow ZH$  Using the Recoil Mass Spectrum

[0712.1791](#)

Unique Identification of Lee-Wick Gauge Bosons at Linear Colliders

[0712.1350](#)

Cavity BPM System Tests for the ILC Spectrometer

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From *Interactions.org*  
6 December 2007

**Persis S. Drell Named Fourth  
Director of the U.S. Department  
of Energy's Stanford Linear  
Accelerator Center**

Persis S. Drell has been named director of the Stanford Linear Accelerator Center (SLAC), effective immediately, Stanford University President John Hennessy announced Thursday.

[Read more...](#)

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From *Illustreret Videnskab*  
December 2007

**Verdens største maskine**

Allerede før den kolossale partikelaccelerator LHC ved CERN har leveret de første resultater, står storesøsteren klar i kulissen. International Linear Collider skal smadre elektroner sammen med positroner for at give os ny viden om, hvordan naturen er skruet sammen.

[Read more...](#)