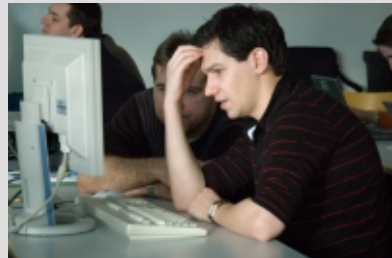


**Around the World**

**Learning to accelerate**



How do you solve a problem like misalignment? Terascale Accelerator School students wrack their brains over machine exercises.

When your day job means measuring the  $F_2$  structure function of the proton or hunting for the Higgs boson, you don't usually stop and wonder how exactly the ingredients of your events reached their collision point. Some 30 junior researchers have just learnt to do just this: at the recent 'Terascale Accelerator School', the first of its kind organised in Germany and a project of the [Helmholtz Alliance](#), physics students turned into nuts-and-bolts accelerator experts for a week. [Read more...](#)

-- Barbara Warmbein

**Calendar**

**Upcoming meetings, conferences, workshops**

[Energy Polarization Workshop](#)

DESY Zeuthen, Germany  
9-11 April 2008

[SiD Workshop](#)

Rutherford Appleton Laboratory, Abingdon, United Kingdom  
14-16 April 2008

[ILC Vertex Detector Workshop](#)

Villa Vigoni, Menaggio, Italy  
21-24 April 2008

[Workshop on High energy photon collisions at the LHC](#)

CERN, Geneva  
21-25 April 2008

[FCAL Collaboration Meeting](#)

Institute of Nuclear Physics, Cracow,

**Feature Story**

**Collaboration between India and Japan for SCRF technology**



Indian-Japanese collaboration for electropolishing: Sankar, Sokhey, Hayano and Bose.

India's Raja Ramanna Centre for Advanced Technology (RRCAT) is a leading institute for research and development in lasers, accelerators and their applications. In the Indian government's current five-year plan (April 2007-April 2012), building infrastructure and developing the technology of niobium superconducting radiofrequency (SCRF) cavities are the two major objectives for high-energy physics and accelerator-related projects. Following this plan, RRCAT wants to build its own electropolishing (EP) facility in India, and three scientists visited Japan to participate in the commissioning of the [new EP system at KEK](#). [Read more...](#)

-- Rika Takahashi

**In the News**

From *New Scientist*  
9 April 2008

**Higgs seen at the LHC**

If there were any fears that particle physics is too esoteric for the general public, the events last weekend should allay them. [Read more...](#)

From *Time*  
9 April 2008

**Higgs Boson: A Ghost in the Machine**

...For the rest of us, solid proof of the Higgs boson would provide a cosmic solace: that beauty and unity exist at the very foundation of the universe, however rare they sometimes seem in the world. [Read more...](#)

**Director's Corner**

**Implementing "internal" reviews for the ILC Technical Design Phase**

Last week, the new Accelerator Advisory Panel (AAP) was [introduced](#) in NewsLine. This week, I follow up with a description of its role and why I believe it will improve the quality of our R&D and design efforts. As part of preparing to undertake the next phase of our work, now called the ILC Technical Design Phase (TDP), we critically assessed the organisational structure we had for the Reference Design Report (RDR). As a result, we decided to make some significant changes. The biggest change was to incorporate a more traditional project management structure within the Global Design Effort. Another important change that we proposed to the International Linear Collider Steering Committee involves streamlining the system of technical reviews. [Read more...](#)



Bill Willis, chair of the Accelerator Advisory Panel

-- Barry Barish

[Director's Corner Archive](#)

**Image of the Week**

**CERN Open Day**

Poland  
6-7 May 2008

[LoopFest VII](#)  
[Radiative Corrections for the LHC and ILC](#)

University at Buffalo, Amherst, New York, USA  
14-16 May 2008

[ICFA NANOBEAM Workshop](#)  
Budker INP, Novosibirsk, Russia  
25-30 May 2008

[XXII Symposium on Photonics and Electronics for Accelerators and High Energy Physics Experiments](#)

Warsaw University of Technology Resort, WILGA  
26 May - 1 June 2008



[GDE Meeting - ILC Conventional Facilities and Siting Workshop](#)

JINR, Dubna, Russia  
3-7 June 2008

[ECFA 2008](#)  
Warsaw, Poland  
9-12 June 2008

#### Upcoming schools

[Terascale Monte Carlo School](#)  
DESY, Hamburg, Germany  
21-24 April 2008



= Collaboration-wide Meetings

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

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From *The Times*  
8 April 2008  
**At 78, scientist hopes for proof soon that he was right about the Universe**

...Speaking after visiting Cern, the European particle physics laboratory that has built the £2.6 billion Large Hadron Collider (LHC) to find the Higgs boson, he praised the collaborative work behind the project, adding that such future work could be jeopardised by a funding crisis surrounding particle physics in Britain.  
[Read more...](#)

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From *Chicago Maroon*  
8 April 2008  
**Fermilab cited in suit to freeze Swiss accelerator**

Switzerland has a long legacy of peaceful neutrality, but two men claim that Swiss scientists are building a device that could destroy the universe.  
[Read more...](#)

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From *Associated Press*  
7 April 2008  
**Physicist Says Particle Will Be Seen**

The "father" of an elusive subatomic particle said Monday he is almost sure it will be discovered in the next year in a race between powerful research equipment in the United States and Europe.  
[Read more...](#)

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From *Columbia Spectator*  
7 April 2008  
**Apocalypse Never at the LHC**  
... It is infinitely more likely that the LHC will destroy our fundamental conception of the universe rather than the universe itself.  
[Read more...](#)

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From *Telegraph.co.uk*  
7 April 2008  
**Prof Peter Higgs interview: Smashing atoms at CERN and the hunt for the 'God' particle**  
... Britain's contribution to the project comes from the Science and Technology Facilities Council, a research council, and it may have to make cutbacks at the LHC, after pulling out of a proposed "linear" smasher, because of an £80 million shortfall.  
[Read more...](#)

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With masses, masses and masses of people it's hard to keep count, but CERN estimates that something like 50000 to 60000 visitors came to the Open Day last Sunday. It was the last chance to see the detectors and machine before operation starts, and all these people did not want to miss the opportunity. The picture shows two of many groups at the CMS detector in the middle of a logistical masterpiece. (Photo: Thomas Zoufal)

#### Announcements

##### arXiv preprints

[0804.0926](#)

Model Building for the Neutrino Sector and Cold Dark Matter

[0804.0622](#)

A Weakly Coupled Ultraviolet Completion of the Littlest Higgs with T-parity

From *Reuters*

7 April 2008

**Key scientist sure "God particle" will be found soon**

British physicist Peter Higgs said on Monday it should soon be possible to prove the existence of a force which gives mass to the universe and makes life possible -- as he first argued 40 years ago.

[Read more...](#)

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From *Tribune de Geneve*

7 April 2008

**CERN draws big crowd**

Thousands line up to explore the mysteries of the world's largest particle accelerator at the physics research center on the Geneva-France border.

[Read more...](#)

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From *Physics World*

3 April 2008

**Cuts threaten UK role at LHC**

...Particle physicists accept that cuts to projects are inevitable, but many question the way in which projects were ranked. Combined with the council's sudden decision in December for the UK to pull out of the International Linear Collider (the potential next big thing in particle physics after the LHC), some researchers have lost faith in the STFC management and fear the UK's international standing in particle physics is being damaged.

[Read more...](#)

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From *interactions*

3 April 2008

**New Director Named to Lead U.S. Department of Energy's Jefferson Lab**

Jefferson Science Associates, LLC today announced that Hugh Montgomery will become the new Director of the U.S. Department of Energy's Thomas Jefferson National Accelerator Facility in Newport News, Virginia.

[Read more...](#)