

### Around the World

#### Creating polarised positron beams

Today's issue features a story from Tohru Takahashi, a particle physicist and associate professor at Hiroshima University. He is the co-author of "Big-Bang wo tsukuridase" (Making the Big-Bang), a book about the ILC.



Participants of the PosiPol Workshop held in Hiroshima, Japan.

The PosiPol2008 workshop was held from 16 to 18 June in Hiroshima, Japan. An unfamiliar word, "PosiPol" stands for "polarised positrons", meaning that the "spins" of positrons are aligned when they meet electrons at the centre of a linear collider. The electron beam is designed to be polarised at the ILC, but according to the baseline configuration positrons are unpolarised (or left naturally polarised) because making polarised positron is a difficult task to do.

[Read more...](#)

-- Tohru Takahashi

### Calendar

#### Upcoming meetings, conferences, workshops

[Joint CsrTA Kickoff Meeting and ILC Damping Rings R&D Workshop \(ILCDR08\)](#)

Cornell University, USA  
8-11 July 2008

[34th International Conference on High Energy Physics \(ICHEP'08\)](#)

Philadelphia, USA  
29 July - 5 August 2008

[Conference on the Design/Optimization of the Silicon Detector at the International Linear Collider](#)

University of Colorado at Boulder, Colorado, USA  
17-19 September 2008

### Feature Story

#### From *interactions.org*: Five million Euros to prepare Europe for the International Linear Collider



ILC-HiGrade will produce a mini series of cavities.

The partners of the 'ILC-HiGrade' proposal for the European Commission's Seventh Framework Programme have just started a contract for five million Euros funding over the next four years with the European Commission. 'ILC-HiGrade' stands for 'International Linear Collider and High Gradient Superconducting RF-Cavities.' One of the main objectives of the proposal is a small serial production of accelerating cavities, superconducting components made of pure niobium for the planned International Linear Collider (ILC), that reach the high technical standards needed for the planned particle physics project. Other objectives of the ILC-HiGrade proposal are the development of a possible organisation and governance for the ILC and measures to prepare for the actual construction of the machine, including a detailed study on possible sites in Europe.

[Read more...](#)

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### Director's Corner

#### The ILC-ECFA Workshop in Warsaw



Stefan Pokorski describes various scenarios for physics at a linear collider.

From 9 to 12 June, the Faculty of Physics at the University of Warsaw, Poland, together with the Institute of Nuclear Studies hosted a workshop under the mandate of the European Committee for Future Accelerators (ECFA) to discuss the physics and detectors for a linear collider. This well attended workshop covered a broad range of topics from the physics of a linear collider to R&D for detectors. The attendants discussed the physics in advance of and preparing for the first results from the Large Hadron Collider (LHC) at CERN that will set the future course for the energy frontier.

[Read more...](#)

-- Barry Barish

### Director's Corner Archive

### Image of the Week

#### Cavities around the world



Calling all NewsLine readers with digital cameras! As you are heading off to your various holiday (and

### In the News

From *Scientific American*  
1 July 2008

#### As LHC Draws Nigh, Nobelists Outline Dreams--And Nightmares

...Gross said that such a result, going against the standard model, would itself be "enormously exciting." What worried him was finding the Higgs and nothing else, because then it would be impossible to persuade world governments to fund future machines such as the proposed International Linear Collider,

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## Upcoming schools

[The second Trans-European School for High Energy Physics \(TES-HEP\)](#)  
Buymerhovka, Sumy region, Ukraine  
3-9 July 2008

[Third International Accelerator School for Linear Colliders \(2008 LC School\)](#)  
Oak Brook, Illinois, USA  
19-29 October 2008



**= Collaboration-wide Meetings**

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

From *Courier News*  
1 July 2008  
**Funding will prevent more Fermilab layoffs**  
New federal dollars save jobs, restart projects  
[Read more...](#)

From *Frankfurter Allgemeine Zeitung*  
30 June 2008  
**Der Urknall von Genf**  
...Denn was man im Untergrund des schweizerisch-französischen Grenzgebiets zu sehen bekommt, ist die größte Maschine, die sich Physikerhirne je ausgedacht haben – ein Teilchenbeschleuniger und Speicherring der Superlative, ausgestattet mit modernster Technik.  
[Read more...](#)

From *Guardian*  
30 June 2008  
**The Big Bang Machine / Cosmic building blocks / The particle menagerie**  
Today's Guardian features a special supplement on the most incredible scientific experiment ever - the Large Hadron Collider at Cern  
[Read more...](#)

From *Guardian*  
30 June 2008  
**Beyond the Standard Model**  
Experiments at Cern will tackle a dilemma at the heart of modern physics that defeated even Einstein, says Jim al-Khalili  
[Read more...](#)

vacation) destinations, keep your eyes open for cavity lookalikes like this one, spotted in Cornwall's Eden Project. There are more out there than you think! Send them to [communicators@linearcollider.org](mailto:communicators@linearcollider.org) and they may show up in NewsLine...

## Announcements

### ILC Note [2008-046](#)

Mechanical tests of Titanium-Stainless Steel bimetallic transition joints

### arXiv preprints [0806.4905](#)

Two-Loop QED Heavy-Flavor Contribution to Bhabha Scattering

### [0806.4560](#)

Applying the POWHEG method to top pair production and decays at the ILC

### [0806.2698](#)

Leptogenesis in the minimal extension of the Zee-Babu model