

### Around the World

#### On the way to the forum



Got a question, problem, solution?  
Post them on the forum!

Many scientists working on ILC detector simulation know: Mokka can give you sleepless nights. This has nothing to do with caffeine, however - Mokka is a software that lets you run full simulations of events in future ILC detectors. It uses the Geant4 simulation tool, and ILC detector people around the world use it – and struggle with it sometimes. If you're one of those people and are looking for answers (or maybe you want to share a particularly interesting line of code?), the website [forum](#) may be the right place for you. [Read more...](#)

-- Barbara Warmbein

### Calendar

#### Upcoming meetings, conferences, workshops

##### [CLIC07](#)

CERN  
16-18 October 2007



##### [ALCPG 2007](#)

Fermilab  
22-26 October 2007

##### [2007 Nuclear Science Symposium and Medical Imaging Conference](#)

Honolulu, Hawaii, USA  
27 October - 3 November 2007

##### [CARE07 Annual Meeting](#)

CERN  
29-31 October 2007

##### [CCAST ILC Accelerator Workshop and 1st Asia ILC R&D Seminar](#)

IHEP, Beijing, China

### Feature Story

#### ILC physicists build their dream house

*Engineers, accelerator and detector physicists initiate dialogue at IRENG07*



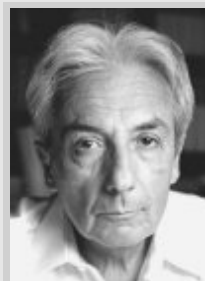
Older detectors can still teach us new tricks as the IRENG07 participants inspected the rollers of the SLD detector at SLAC.

Be it a house renovation or even a proposed particle accelerator, anyone involved in a construction project can appreciate the 1948 classic film *Mr. Blandings Builds His Dream House*, starring Cary Grant and Myrna Loy. In a memorable scene, the married couple meets with their architect, who presents them with the plans for their home. Mr. and Mrs. Blandings proceed to mark up the plans until they are no longer recognisable, turning the mere home into their dream home. Sure, there is the minor detail of the chimney going through the middle of Mrs. Blandings's sewing room, but that is the architect's problem to figure out, right? [Read more...](#)

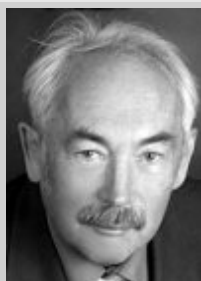
-- Elizabeth Clements

### Image of the Week

#### 2007 Nobel Prize in Physics for Albert Fert and Peter Grünberg



Albert Fert (photo: Invisuphoto)



Peter Grünberg (photo: © Forschungszentrum Jülich)

### Director's Corner

#### Unified versus plug compatible designs



ILC cryomodule cutaway view

We are now making the transition from completing the International Linear Collider reference design to beginning the engineering design phase by holding a set of kick-off meetings to cover the major areas of the machine. The ILC project managers have organised this intensive set of meetings in order to interact closely with task leaders and team members who will be responsible for carrying out the actual design tasks. The meetings are covering a broad spectrum of issues that need to be understood before drawing up detailed work packages that will define our work toward the Engineering Design Report. The kick-off meetings cover issues that vary from organisational ones and technical topics to subjects that will have important consequences in the design work. A very good example of the difficult questions currently under discussion is to what extent we will require unified designs versus plug compatible designs for the cryomodules.

[Read more...](#)

-- Barry Barish

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

### Announcements

5-7 November 2007

[ILC EDMS Power User Training](#)

DESY

26-30 November 2007

[International Vacuum Symposium, IVS-2007](#)

Homi Bhabha Auditorium, TIFR, Colaba, Mumbai, India

28-30 November 2007

[Symposium Poster](#), [Symposium Brochure](#)

**Upcoming schools**

[US Particle Accelerator School](#)

UC at Santa Cruz

14-25 January 2007



= **Collaboration-wide Meetings**

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

This year's physics prize is awarded for the technology that is used to read data on hard disks. It is thanks to this technology that it has been possible to miniaturize hard disks so radically in recent years. Sensitive read-out heads are needed to be able to read data from the compact hard disks used in laptops and some music players, for instance. Read the whole Physics Nobel Prize [press release](#).

**In the News**

From *Nobelprize.org*

9 October 2007

**Physics Nobel Prize**

The Nobel Prize in Physics goes to Albert Fert and Peter Grünberg "for the discovery of Giant Magnetoresistance".

[Read more...](#)

From *Fermilab Today*

8 October 2007

**Sacha Kopp: Letter to the Editor**

I write in response to the recent Director's Corner by Barry Barish, "Fermilab and Project X," reprinted in the September 20 edition of Fermilab Today.

[Read more...](#)

From *Columbia Spectator*

8 October 2007

**International Atom-Smashing**

... We are currently on the brink of a new phase in high energy physics: the Large Hadron Collider, the most powerful accelerator ever built, is scheduled to open next year in Switzerland. Plans are also in the works for the International Linear Collider, a sort of sister-accelerator to the LHC.

[Read more...](#)

From *BBC Radio 4 - In our Time*

4 October 2007

**Antimatter**

... Since then physicists have created antimatter in the laboratory and we even use it in our hospitals, but antimatter remains fundamentally mysterious – there should be much more of it around but there isn't and to understand why may bring us closer to understanding events at the origin of the universe.

[Read more...](#)

**Call for Letters of Intent**

The International Linear Collider Steering Committee (ILCSC) announces a call for Letters of Intent (LOIs) to produce reference designs for the two ILC detectors. The guidelines for writing the LOIs can be found [here](#). The LOIs should be sent to the ILCSC by 1 October 2008.

**ILC NewsLine survey**

If you subscribe to this newsletter, you should have recently received a survey. We greatly appreciate the time you will take to fill it out. We hope that your feedback will help us provide a better publication for you! If you didn't receive it or have any questions, please [send us an email](#).

**Register for ALCPG07**

It's not too late to register for the joint meeting of the American Linear Collider Physics Group and ILC Global Design Effort that will take place at Fermilab on 22-26 October. [More information](#)

**Questions wanted for dueling pianos**

Submit your [questions](#) now for the "Dueling Pianos" session scheduled for the evening of 23 October during the ALCPG07 workshop at Fermilab. [More information](#)

**arXiv preprints**

[0710.1489](#)

8 Oct 2007

Lepton Flavour Violating Effects on Chargino Production at the ILC

[0710.0838](#)

3 Oct 2007

Studying QCD factorizations in exclusive  $\gamma^* \gamma^* \rightarrow \rho_L^0 \rho_L^0$

[0710.0833](#)

3 Oct 2007

Perturbative QCD in the Regge limit: Prospects at ILC

[0710.0777](#)

3 Oct 2007

Beyond the Standard Model at the LHC and Beyond

[0710.0726](#)

3 Oct 2007

Distinguishing SUSY scenarios using  $\tau$  polarisation and  $\tilde{\chi}_1^0$  Dark Matter

**EuroTeV 2006 Reports**

[2007-003](#)

Effect of Altering the Cavity Shape in Infinitely Periodic Dipole Cavities

[2007-004](#)

Large Aperture Permanent Magnet  
Wiggler for the ILC Damping Rings

[2007-006](#)

Fast Luminosity Measurement and  
Beam Parameter Determination