

## Around the World

### Electron Cloud Studies Conducted at Cornell University



In the CESR control room, John Flanagan, KEK, Kathy Harkay, ANL, join Jerry Codner, Cornell (back to camera) in taking data on the electron cloud effect. Also participating in the measurements were Art Molvik, LLNL and Robert Holtzapfel and Jamie Kern, Alfred University.

In the end of January, the Laboratory for Elementary Particle Physics (LEPP) at Cornell University hosted collaborators from KEK, Lawrence Livermore National Laboratory, Argonne National Laboratory and Alfred University (an undergraduate University in New York State) to conduct electron cloud studies using the CESR storage ring. CESR is unique in that it is a "wiggler dominated" storage ring capable of storing intense beams of both electrons and positrons, singly or simultaneously.

[Read more...](#)

-- Maury Tigner, Cornell University

## Calendar

## Feature Story

### International Review Panel Looks at ILC Detectors



Members of the committee reviewing the ILC detector tracking systems.

The experiments will be the centre piece of the future ILC, and all the physics will revolve around them. They are being developed by sub-detector R&D and test-beam studies. The [Worldwide Study](#) (WWS) formed the Detector R&D Panel, headed by Chris Damerell, to review the activities and list missing topics. The panel has now started to hold regular reviews of the R&D projects. A dedicated committee will be formed for each sub-detector review, including external consultants, local experts, regional representatives and members of the panel. During the last [ILC meeting](#) in Beijing in February 2007, it reviewed the detector tracking systems.

[Read more...](#)

-- Perrine Royole-Degieux

## In the News

## Director's Corner

### The Road to the ILC: Convincing our Colleagues



Jon Bagger presented the ILC at the AAAS annual meeting.

Now that we have released our draft Reference Design Report for the ILC, our short-term focus is on completing and finalising the RDR. This will involve completing some unfinished work, undergoing international reviews and then revising and finalising the reference design and costing. We are scheduled to submit the report to the ILCSC and ICFA at their meetings this summer. We are also busy discussing and preparing for the engineering design phase and its associated R&D, which will require increased resources and some reorganisation of our efforts. The release of the RDR also increases the opportunities for us to explain the scientific motivation for developing the ILC as a future global science project. For example, we participated in a special session on future frontiers in particle physics organised at the annual meeting of the [American Association for the Advancement of Science](#) (AAAS) in San Francisco last week.

[Read more...](#)

-- Barry Barish

[Director's Corner Archive](#)

## Feature Story

## Upcoming meetings, conferences, workshops

### [ILCDR07 - Damping Rings R&D Meeting](#)

LNF-INFN, Frascati, Italy  
5-7 March 2007

### [The LHC Early Phase for the ILC](#)

Fermilab, Batavia, Illinois  
12-14 April 2007

### [TESLA Technology Collaboration Meeting](#)

Fermilab, Batavia, Illinois  
23-26 April 2007

MAC Meeting  
Fermilab  
26-27 April 2007

### [DOE/NSF ILC Americas Regional Team Review](#)

Fermilab  
30 April - 2 May

### [Annual WILGA Conference](#)

Warsaw University of Technology  
Resort, Poland  
21-27 May 2007



### [LCWS 2007](#)

Hamburg, Germany  
30 May - 4 June 2007

### [VII International workshop on Problems of Charged Particle Accelerators: Electron-positron Colliders](#)

JINR-BINP, Alushta (Crimea, Ukraine)  
2-8 September 2007

[View Full Calendar...](#)



= Collaboration-wide Meetings

[GDE Meetings Calendar](#)

From *Reuters*

18 February 2007

### **Physicists dream of next big particle smasher**

[Read more...](#)

From *Earth and Sky*

18 February 2007

### **Will science find the "God particle"?**

[Read more...](#)

From *PhysOrg.com*

16 February 2007

### **Nobel laureate Burton Richter to speak about future of particle physics**

[Read more...](#)

From *PhysOrg.com*

14 February 2007

### **Smashing time: Physicists race to find dark matter and the 'God particle'**

[Read more...](#)

From *El Pais*

14 February 2007

### **El futuro colisionador lineal de partículas medirá 31 kilómetros**

[Read more...](#)

From *Onversity*

14 February 2007

### **International Linear Collider 2016 : Etudier l'univers**

[Read more...](#)

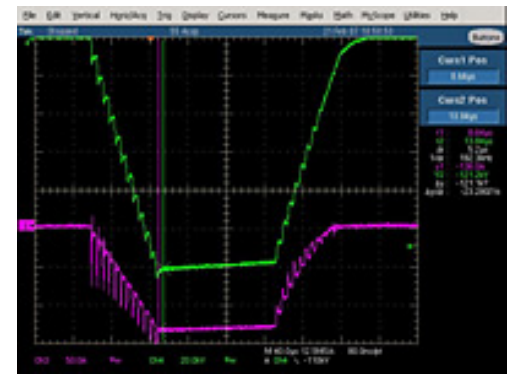
From *NouvelObs.com*

12 February 2007

### **Les physiciens dévoilent les plans du futur grand accélérateur de particules**

[Read more...](#)

## Hot Off the Presses: Marx Modulator Milestone



Yesterday morning a team led by Greg Leyh at SLAC successfully demonstrated the Marx modulator running at 120 kV (kilovolts) at a low pulse width. Later in the day, the team stretched the pulse out to 1.4 msec (milliseconds) at 100 kV. The Marx modulator is an ILC R&D programme at SLAC that eliminates the need for a massive transformer to raise the output voltage up to hundreds of kilovolts. "This is a most impressive and encouraging milestone for all who have worked so hard on it," said SLAC's Ray Larsen. "The Marx indeed looks promising to deliver a new era of intelligent, efficient high power electronics." Look for more information about this milestone in upcoming issues of *SLAC Today* and *ILC NewsLine*.

## Announcements

### **ILC-Related Preprints**

[hep-ph/0702164](#)

16 Feb 2007

Probing the lightest new gauge boson  $B_H$  in the littlest Higgs model via the processes  $\Upsilon\Upsilon \rightarrow f\bar{f} B_H$  at the ILC

[hep-ph/0702156](#)

15 Feb 2007

Full one-loop electroweak corrections to  $h^0(H^0, A^0) H^\pm W^\mp$  associated productions at  $e^+e^-$  linear colliders

[hep-ph/0702124](#)

12 Feb 2007

Searching for the Higgs boson