

### Around the World

#### Interactions: it works!



The InterAction collaboration on 19 April 2007.

Interactions members now officially classify as a tribe: flocking round the warming fire against the Californian chill they shared a goat during their meeting at SLAC last week. But though food may be memorable during the meetings of the InterAction collaboration, discussions and strategic plans are even more important for the communication representatives of particle physics labs, universities and projects. LHC start-up, the future of ILC communication and the meaning of blogs were just a few of the topics on the agenda of the three-day meeting that brought together 16 core and about 10 extended members of the InterAction family. They welcomed two new faces: Rika Takahashi, who has just taken up her job as ILC communicator for Asia at KEK, and Romeo Bassoli from INFN.

[Read more...](#)

-- Barbara Warmbein

### Calendar

#### Upcoming meetings, conferences, workshops

[TESLA Technology Collaboration Meeting](#)

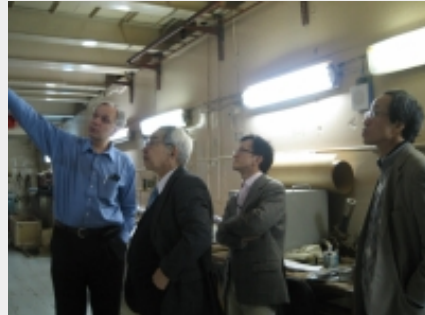
Fermilab, Batavia, Illinois  
23-26 April 2007

MAC Meeting  
Fermilab  
26-27 April 2007

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

### Feature Story

#### Hot topics in intensely cold Russia



A delegation from KEK visited the ERL facility at BINP in Russia.

The baseline design for the International Linear Collider (ILC) positron source is based on multi-MeV photons that produce pairs in a metallic target. The photons are created by the main electron beam passing through a helical undulator. The conventional method, positron generation via pair production using an electron beam, which is used as the positron source in all existing accelerators in the world, is adopted however as an alternative technology in the Baseline Configuration Document (BCD). If the method of using fixed metal targets is adopted for the ILC design, the abundant number of positrons would cause an excessive temperature rise and melt the targets. This is a challenge that ILC scientists face to find an appropriate approach for this thermal breakdown phenomenon of the metal target, and to clear the technical difficulties to develop an extremely high-speed spinning target to prevent it. These challenges would still remain to some degree in undulator-based methods too. As a solution, Pavel Logatchev of the Budka Institute of Nuclear Physics (BINP) suggests positron production using a liquid metal target.

[Read more...](#)

-- Nobuko Kobayashi

### In the News

### Director's Corner

#### KEK and Fermilab: Strengthening collaborations



A snapshot from my meeting with KEK Director Atsuto Suzuki.

Two of our principle collaborating institutions in the ILC are KEK Laboratory in Tsukuba, Japan and Fermilab in Batavia, Illinois. This week the KEK Director General, Atsuto Suzuki, came to Fermilab to discuss increased collaboration. Atsuto Suzuki is a very distinguished physicist, whom I have known for many years due to our mutual histories in neutrino physics. I note and congratulate him for recently being awarded the prestigious Bruno Pontecorvo Prize in recognition of his contribution to the "Discovery of Reactor Antineutrino Oscillations and Detection of Geantineutrinos in the KamLAND experiment." Atsuto's Fermilab visit resulted in a newly signed MOU (Memorandum of Understanding) between the two laboratories. This growing partnership is a very positive development for high energy physics, especially for the ILC where so much of our programme and ambitions rest with these two large laboratories. During the visit, Atsuto and I were also able to have a very productive meeting, where we candidly discussed many issues related to moving the ILC forward in the coming years.

[Read more...](#)

-- Barry Barish

[Director's Corner Archive](#)

[Announcements](#)

Fermilab  
30 April - 2 May

[ILC Software and Tools Workshop](#)

LAL - Orsay  
2-4 May 2007

[CALICE Collaboration Meeting](#)

Kobe University, Kobe, Japan  
10-12 May 2007

[Annual WILGA Conference](#)

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

[POSIPOL 2007 Workshop](#)

LAL-Orsay, France  
23-25 May 2007



[LCWS 2007](#)

Hamburg, Germany  
30 May - 3 June 2007



[ILC 2007](#)

Hamburg, Germany  
30 May - 2 June 2007



= Collaboration-wide  
Meetings

[GDE Meetings Calendar](#)

From *AIP: Physics News Update*  
23 April 2007

**Tevatron's Higgs Quest Quickens**

Physicists from Fermilab's Tevatron collider have just reported their most comprehensive summary yet of physics at the highest laboratory energies. At last week's American Physical Society (APS) meeting in Jacksonville, Florida they delivered dozens of papers on a spectrum of topics, many of which are related in some way to the Higgs boson.

[Read more...](#)

From *Fermilab Press Release*  
20 April 2007

**Argonne National Laboratory and Fermilab celebrate as Governor Blagojevich proclaims April 21 as Illinois Particle Accelerator Day**

In celebration of Particle Accelerator Day this weekend in Illinois, two U.S. Department of Energy Laboratories, Argonne National Laboratory and Fermi National Accelerator Laboratory, have planned events at their respective accelerator facilities. This is the second year that the two labs are celebrating "Particle Accelerator Day"- a celebration that follows Governor Rod Blagojevich's proclamation of April 21 as Particle Accelerator Day in Illinois.

[Read more...](#)

From *SLAC Today*  
19 April 2007

**Electron Cloud Workshops**

Electron cloud phenomena in accelerators have become such an important topic that there have been two recent workshops on the subject. E-CLOUD 07 was held April 9th through 12th in the beautifully flowering city of Daegu, Korea.

[Read more...](#)

**ILC2007 General Program Announcement**

The third General ILC Workshop (ILC2007) will be held at DESY from Wednesday 30 May to Saturday 2 June. The workshop will run in parallel with the LCWS 2007 physics and detector workshops, and there will be several joint plenary sessions. Our plans are to make these joint workshops a tour de force of the global ILC community.

[More information](#)

**ILC-Related Preprints**

[arXiv:0704.2684](#)

20 Apr 2007

Effects of Lepton Flavour Violation on Chargino Production at the Linear Collider

[arXiv:0704.2548](#)

19 Apr 2007

Triggering at High Luminosity Colliders