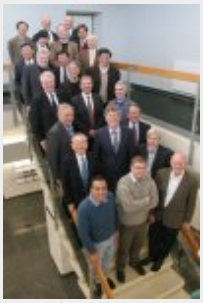
Research Director's Report

New timeline for detector activities



The ILCSC approved the new detector plans during their meeting this week.

For the newly formed detector Executive Board, the first task in the past month was to work out a new timeline under the present financial difficulties. The plan is to maintain the momentum of the detector community. We need to keep the process which began with the Letter of Intent (LOI) procedure toward the integration of various R&D efforts and ideas into an optimised detector design for the ILC. The financial condition imposes limitations on our speed, but we do not pause. The Global Design Effort also is determined and has worked hard to set up a realistic new plan. A key condition for us is to proceed in synchronisation with this GDE timeline. In particular, in order to communicate efficiently with the accelerator team about machine-detector interface (MDI) matters, a well coordinated pace is required. The new detector plans prepared in consultation with the Organizing Committee of the Worldwide Study of Physics and Detectors for Future Linear e+e- Colliders (WWS-OC) were discussed at the last ILCSC meeting on 11 February at DESY and were approved.
Read more...

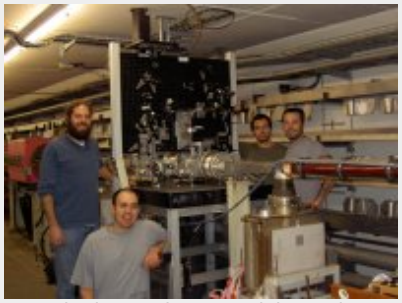
-- Sakue Yamada

Research Director's Report Archive

Calendar

Feature Story

Accelerating past the finishing line



The laser wire team (pictured clockwise from top left: Gary Boorman, Chafik Driouichi, Alessio Bosco and Mike Price) tested their system at DESY's PETRA ring as part of the EUROTeV project.

It was supposed be the wrap-up meeting of a successful accelerator physics project. However, when the news came that the EU-funded EUROTeV was going to be extended, the meeting in Frascati, Italy, from 23 to 25 January turned into both a summary and a future-planning session. “We've got another year to go and the project is as useful now as it was at the kick-off meeting in 2004,” says scientific coordinator Nick Walker from DESY. The collaboration contributed big chunks of R&D to the *Reference Design Report* and thinks that most of the work can prove useful for projects beyond the ILC. “With the collected EUROTeV expertise in beam dynamics, optics design, positron source R&D and much more we're almost regarded as an institution,” adds project coordinator Eckhard Elsen.
Read more...

-- Barbara Warmbein

In the News

Director's Corner

P5 – What goes around, comes around

Charles Baltay, new chair of the P5 committee

In 2001, Jon Bagger and I served as co-chairs of a long-range planning subpanel for HEPAP, the US' High Energy Physics Advisory Panel, which recommended a 1-TeV scale linear collider as the highest priority long-term goal for US high-energy physics. Another very important recommendation of that same panel report was to form a new panel that we called the Particle Physics Project Prioritization Panel, or P5. This P5 panel has recently been reconstituted and is undertaking a new long-range study that will probably prove quite important for the future course of the US ILC R&D efforts. The initial P5 meeting took place at the beginning of February at Fermilab, and one session was entirely devoted to efforts globally and in the US towards a linear collider.
Read more...

-- Barry Barish

Director's Corner Archive

Announcements

Register now!

Still haven't registered for Sendai? Even though the registration deadline passed last week and the blocked hotel rooms have now been released it is still possible to do so. Hurry!

arXiv preprints

0802.0325

The new charged gauge boson W' and the subprocess $eq \to \nu q'$ at e^+e^- and ep colliders

0802.0319

Probing triple Higgs couplings of the Two Higgs Doublet Model at Linear Collider

Upcoming meetings, conferences, workshops

TILC08
Joint ACFA Physics and Detector Workshop and (GDE meeting) on International Linear Collider
Sendai
3-6 March 2008

Positron Source Meeting
DESY Zeuthen, Germany
7-9 April 2008

Energy Polarization Workshop
DESY Zeuthen, Germany
9-11 April 2008

SiD Workshop
RAL
14-16 April 2008

Workshop on High energy photon collisions at the LHC
CERN, Geneva
21-25 April 2008

LoopFest VII
Radiative Corrections for the LHC and ILC
University at Buffalo, The State University of New York, Amherst, New York, USA
14-16 May 2008

ICFA NANOBEAM Workshop (NANOBEAM-08)
Announcement
Budker INP, Novosibirsk, Russia
25-30 May 2008

= Collaboration-wide Meetings

GDE Meetings calendar

View complete ILC calendar

From *nature*
13 February 2008
Love: You have 4 minutes to choose your perfect mate
NewsLine's contribution to Valentine's Day. Warning: this article is not about particle physics.
Read more...

From *nature*
13 February 2008
From Russia with scintillation
The story of CERN's crucial crystals.
Read more...

From *wired*
13 February 2008
Budget Cuts Undermine U.S. Role in Atom-Smasher Project
... The construction of the so-called International Linear Collider, or ILC, is widely seen in the high-energy physics community as the field's next major step, and an important complement to the powerful laboratory opening at the Switzerland facility of the European Laboratory for Particle Physics, or CERN, later this year.
Read more...

From *Fermilab Today*
12 February 2008
Director's corner: Laying foundations
The President's FY09 budget request contains $35M for the U.S. contribution to ILC R&D, consistent with the Administration's position that the U.S.
Read more...

From *Liverpool Daily Post*
12 February 2008
More jobs 'to be lost at Daresbury'
...the Science and Technology Facilities Council (STFC), announced 150 job losses last week when the Synchrotron Radiation Source (SRS) is decommissioned.
Read more...

From *Fermilab Today*
11 February 2008
Fermilab scientists contribute to 3D chip development
...Fermilab scientists believe that new 3D vertical integrated silicon technology may help to make future particle detectors lighter, more concise and consume less power.
Read more...

EUROTeV Reports

2007-60
Electron Cloud Effects and Technological Consequences

2007-64
Halo Estimates and Simulations for Linear Colliders

2007-65
Feedback Studies

2007-66
Bunch Compressor for Beam-Based Alignment

2007-67
Wakefield Models for Particle Tracking Codes

From *Space.com*
11 February 2008
New Cosmic Theory Unites Dark Forces
The two biggest mysteries in cosmology may be one.
Read more...

From *Science News*
9 February 2008
Wish List: FY '09 budget proposal ups physical sciences
The 2009 proposal is encouraging for particle physicists. "In my best hopes, that's what I wanted to see," says Pier Oddone.
Read more...

From *Physics World*
7 February 2007
UK confirms withdrawal from ILC
Physicists in the UK have failed to persuade research council bosses to rejoin preparations for the International Linear Collider (ILC).
Read more...

From *interactions*
7 February 2008
STFC Council Meeting
... The Council re-affirmed the decisions already taken with respect to withdrawal from the International Linear Collider [ILC] project and ground-based Solar-Terrestrial Physics [STP] facilities and confirmed its intention to negotiate a reduction in its investment in Gemini.
Read more...

From *Chicago Tribune*
6 February 2008
Fermilab rescue too late
Any further disruptions to science funding creates "a real chance that we'll lose our competitive edge as a country," said Orbach. "This is a critical year."
Read more...

From *interactions*
6 February 2008
IceCube Construction reaches halfway point
The IceCube team exceeded their 2007-2008 seasonal stretch goal of 18 detector strings, four more than the project baseline plan. The 18 down-hole cables mark the halfway point in the construction of the neutrino telescope that will detect neutrinos with energies exceeding TeV.
Read more...