

Research Director's Report

We call for Expressions of Interest



Research Director Sakue Yamada requests Expressions of Interest.

Several steps have been taken since my last report in February. At the ACFA-GDE joint workshop in Sendai held two weeks ago, I [reported](#) on the latest development in some detail and exchanged opinions with participating colleagues.

First good news: the International Detector Advisory Group (IDAG) membership list is now complete. The group will give advice on the validation process of Letters of Intent and detector R&D. The members include experienced experimentalists, active phenomenology theorists and ILC accelerator experts. They are: Michael Danilov (ITEP), Michel Davier (LAL/Paris-Sud University), Abdelhak Djouadi (Paris-Sud University), Eckhard Elsen (DESY), Paul Grannis (SUNY at Stony Brook), Rohini Godbole (Indian Institute of Science), Dan Green (FNAL), JoAnne Hewett (SLAC), Tom Himel (SLAC), Dean Karlen (Victoria University), Sun-Kee Kim (Seoul National University), Tomio Kobayashi (Tokyo University), Weiguo Li (IHEP), Richard Nickerson (Oxford University) and Nobukazu Toge (KEK). The group is chaired by [Michel Davier](#).

[Read more...](#)

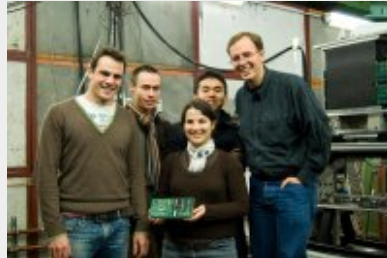
-- Sakue Yamada

[Research Director's Report Archive](#)

[Calendar](#)

Around the World

A different kind of Terascale



Some members of the UK team (Jamie Ballin, Matt Noy, Anne-Marie Magnan, Yoshinari Mikami and Marcel Stanitzki) presenting their data acquisition board with sensor after a successful run in the test beam at DESY.

Have you ever used a map to find an electron? Not possible, you say? Think again. Spell it slightly differently – MAPS – put it into an electromagnetic calorimeter, and you may well be able to track an electron in a calorimeter and see the single electrons in a particle shower. With a spatial granularity of 50 microns square– that's 50 thousandths of a millimetre – a potential sensor, called MAPS or monolithic active pixel sensor, for an ILC detector's digital electromagnetic calorimeter could be an efficient alternative to existing silicon technology. A UK-based group is currently evaluating how suitable this technology is for a calorimeter optimised for particle flow, with a view to seeing how efficient, reliable and cost-effective it is.

[Read more...](#)

-- Barbara Warmbein

In the News

From *nature*
19 March 2008

Letter: Difference in direct charge-parity violation between charged and neutral B meson decays

... Although it is susceptible to strong interaction effects that need further clarification, this large deviation in direct CP violation between charged and neutral B meson decays could be an indication of new sources of CP violation—which would help to explain the dominance of matter in the Universe.

[Read more...](#)

Director's Corner

Congratulations, it's a PAC - scientific oversight for the GDE



Group photo of the ILCSC taken at their last meeting at DESY

The International Linear Collider Steering Committee (ILCSC) of ICFA met at DESY in Hamburg on 11 February – their first meeting since October last year. The ILCSC is responsible for creating the Global Design Effort and for appointing me as GDE director, and it provides the continued scientific oversight for our efforts. The ILCSC Memorandum of Understanding is the official collaborative agreement for the countries and laboratories involved in R&D and design towards the ILC. At their most recent meeting at DESY, the ILCSC reviewed our revised plans for the Technical Design Phase, taking into account the funding reductions from the UK and US. This important meeting established the foundation for our future work in the GDE and for the experimental community as they also enter into a new phase of their activities, calling for Expressions of Interest and Letters of Intent.

[Read more...](#)

-- Barry Barish

[Director's Corner Archive](#)

[Image of the Week](#)

Upcoming meetings, conferences, workshops

[Positron Source Meeting](#)

DESY Zeuthen, Germany
7-9 April 2008

[Energy Polarization Workshop](#)

DESY Zeuthen, Germany
9-11 April 2008

[SiD Workshop](#)

Rutherford Appleton Laboratory,
Abingdon, United Kingdom
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, Amherst, New York, USA
14-16 May 2008

[ICFA NANOBEAM Workshop](#)

Budker INP, Novosibirsk, Russia
25-30 May 2008

[XXII Symposium on Photonics and Electronics for Accelerators and High Energy Physics Experiments](#)

Warsaw University of Technology
Resort, WILGA
26 May - 1 June 2008



[GDE Meeting - ILC](#)

[Conventional Facilities and Siting Workshop](#)

JINR, Dubna, Russia
3-7 June 2008

[ECFA 2008](#)

Warsaw, Poland
9-12 June 2008

Upcoming schools

[Terascale Monte Carlo School](#)

DESY, Hamburg, Germany
21-24 April 2008

From *nature*

19 March 2008

Particle physics: Song of the electroweak penguin

An unexpected imbalance in how particles containing the heaviest quarks decay might reveal exotic influences — and perhaps help to explain why matter, rather than antimatter, dominates the Universe.

[Read more...](#)

From *New Scientist*

19 March 2008

Japanese particle accelerator hints at 'new physics'

... Now an international collaboration working at the KEK accelerator in Tsukuba, Japan, may have seen a sign of it.

[Read more...](#)

From *New Scientist*

18 March 2008

Flipping particle could explain missing antimatter

It is one of the biggest mysteries in physics - where did all the antimatter go? Now a team of physicists claims to have found the first ever hint of an answer in experimental data.

[Read more...](#)

From *interactions*

18 March 2008

CERN opens its doors to the world

On 6 April 2008, CERN will open its doors to the public, offering a unique chance to visit its newest and largest particle accelerator, the Large Hadron Collider (LHC), before it goes into operation later this year.

[Read more...](#)

From *New Scientist*

13 March 2008

Q&A: Boosting UK science

John Denham, the Secretary of State for Innovation, Universities and Skills, is a rare creature in the British government, a cabinet minister with a science degree.

[Read more...](#)

From *Medill Reports*

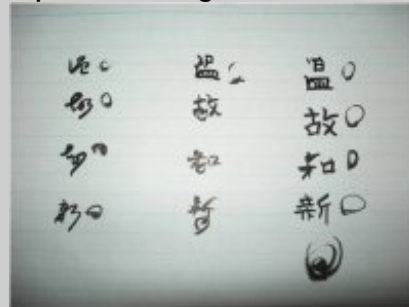
12 March 2008

Is the future of American science at risk?

... Fermilab expected funding for the proposed International Linear Collider to keep it on the cutting edge after the Tevatron closes, Oddone said.

[Read more...](#)

Japanese writing session at IWAA



Alignment study is the crucial part for the accelerator design. At the 10th International Workshop for Accelerator Alignment (IWAA) held at KEK in February, scientists also learned Japanese style of alignment of words: Shuji, Japanese calligraphy. This calligraphy, done by a European scientist, says 'Onko-Chishin', which means 'Find new wisdom through old things'.

Announcements

arXiv preprints

[0803.2584](#)

Neutralino relic density from ILC measurements in the CPV MSSM

[0803.1556](#)

Searching for doubly charged Higgs bosons in Möller scattering by resonance effects at linear e-e- collider



= Collaboration-wide Meetings

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

From *Daily Yomiuri Online*
13 March 2008

Kibo typifies perils of international projects

... Japan, the United States and European countries are currently promoting the International Linear Collider (ILC) project, which will study superconductivity for future particle accelerators.

[Read more...](#)

From *Physics World*
29 February 2008

Full steam ahead

... He also thinks CERN should become more involved in the International Linear Collider (ILC), which would use existing technology to achieve the same goal but would be more limited in energy.

[Read more...](#)