# **Physics and Experiment Board Meeting**

October 5 (1400 GMT), 2010 Minutes (prepared by J. Brau)

**Present via Webex:** Jim Brau, Karsten Buesser, Catherine Clerc, Marcel Demarteau, John Jaros, Akiya Miyamoto, Michael Peskin, Francois Richard, Yasuhiro Sugimoto, Andy White, Sakue Yamada, Hitoshi Yamamoto.

Excused: Ties Behnke.

## **Upcoming Meetings**

The Physics and Experiment Board will meet in Geneva, during the ECFA Linear Collider Workshop, during the lunch break on Wednesday, October 20.

The ILC PAC will meet at the University of Oregon, Eugene, USA, on November 11-12.

The following ILC PAC will meet in Taiwan, May 19-20, 2011.

# White Paper on the Comprehensive Project Design Guidance for the International Linear Collider

Jon Bagger, as chair of the ILCSC, has requested input from the community regarding the draft white paper.

http://cpdg.kek.jp (with cpdg as the username and password)

Everyone is invited to comment individually. The ILC detector management team will submit a comment, and Sakue asked the PE Board members to inform him with comments to be considered for the detector management statement.

## **Interim Report of Detector Activities**

Sakue was asked by the ILCSC to prepare an interim report of detector activities. It should be submitted in time for the next ILCSC meeting, February 17, 2011 at IHEP, Beijing. Sakue presented a draft outline for the interim report, which was discussed. Following the PEB meeting, Sakue updated the outline in response to the discussion. The revised draft is attached below. The members of the PE Board are asked to contribute the appropriate sections for the interim report, with first drafts before Christmas, with figures.

The GDE is also preparing a report of activities on the same time scale. Their report will contain many photos and figures. They invited the detector community to contribute a section on detector developments. This invitation was considered. It was preferred to

prepare a separate volume with a similar style, which can serve as a companion to the accelerator volume.

## SiD - Andy

Much of the recent effort has been devoted to planning for the SiD Workshop in Oregon, November 15-17. There is a web page, a tentative agenda, and speakers have mostly been identified. The purpose of the meeting is two-fold: review of R&D, and plan for the DBD. Sakue asked that the white paper be discussed at the meeting, and Andy agreed that would be useful. SiD is also planning a meeting on Monday morning, October 18, at CERN, just before the start of the ECFA Linear Collider Workshop.

#### ILD - Yasuhiro

ILD is planning two satellite meetings at CERN on the Monday morning, October 18, just before the start of the ECFA Linear Collider Workshop. One will address engineering and the other software.

#### MDI - Karsten

There is now a program for the CERN Workshop.

Discussions on the common detector motion system continue. An important question is how a platform vibrates, and a proposal to make measurements of the platform at CMS has been made at CERN. If these measurements are taken, they will serve as input to a simulation for the ILC.

There is no response yet to the request for engineering support from the labs.

## **Engineering Tools – Catherine**

No news.

## **Detector R&D – Marcel**

Detector R&D group is preparing for the interview with the IDAG in Geneva. Most of the members of the group are expected to be present for the interview.

#### Software – Akiya

The generator working group met recently. The luminosity spectrum has been done for all of the new ILC parameters, including the 1 TeV parameters. Event generation will be completed after the Geneva workshop.

## **Physics - Michael**

The Physics group expects to complete the benchmarks specification before the Geneva workshop.

#### SB2009 - Jim

Updates of studies done for SB2009 are expected to be presented at the Geneva workshop based on the new ILC machine parameters.

## Joint Working Group with CLIC

Francois will report at the Oregon PAC meeting. The CDR may be delayed, which could create some conflicts issues between the CDR efforts and the DBD work.

#### DBD and TDR in 2012

John asked about the plans for coordination of the DBDs with the TDR in 2012. Sakue indicated most of the recent discussions on deliverables with the GDE had focused on the interim reports, but coordination of the 2012 documents do need to be discussed, and Sakue will do it

## **Common Costing Group - Sakue**

SiD has provided members names to Sakue for the common costing group, and ILD is expected to soon, as well. At that point, the group will be able to begin discussions.

## **Next meeting**

The next meeting will be during the Geneva ECFA Linear Collider Workshop on October 20, during the lunchtime break. Michel will be invited as an IDAG observer.

## **Interim Report of Detector Activity**

Draft Outline v3 (05.Oct.2010) Conclusion of PEB

The interim report will be submitted to ILCSC but will take a form like an annual report to be addressed to funding agencies and wider community, too. It will be printed.

Forward S.Y. 1

- 1 Physics Overview (M.P.) 5
- 2 Introductory Overview (S.Y. + F.R.) 10
- 2.1 LOI process
- 2.2 Purpose, brief history

Members and its role, validation process and recommendation
2.5 The goal of the LOI process, detailed base line reports
3 Activity of the detector R&D and Integration (coordination H.Y.) 20  Joint work by ILD+SID.  For each component
4. Physics simulation updates(?) (coordination H.Y.)  To be described commonly by the two groups?
5. Common Task Groups 10
5.1 MDI
5.2 Engineering Tools
5.3 Detector R&D
5.4 Software
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6 Various working groups 6
6.1 SB2009WG (J.B.)
6.2 Joint working group for cooperation with CLIC (F.R.)

2.3 Organization of the activity

2.5 IDAG

 $2.4~\mathrm{Management,\ detector\ groups,\ CTGs,\ SB2009WG}$