

Physics and Experiment Board Meeting

May 25 (1400 GMT), 2010

Minutes (prepared by J. Brau)

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

PAC Meeting in Valencia

The ILC PAC met on May 13-14 in Valencia. The first day dealt with progress on the accelerator, and the second day with detectors. There was a closeout on the first day, and a separate closeout on the second day. The detector presentations included Sakue's overview of activities, reports by Ties and Phil on ILD and SiD, Jim's report on the SB2009 Physics and Detector Working Group, and Francois' report on the CLIC-ILC cooperation on detectors.

During the detector closeout the PAC stated they would like one integrated closeout in future meetings. The PAC supported efforts to improve communications between the detector and accelerator communities. The PAC report is not yet public.

For the next PAC meeting Sakue wants to plan the agenda well in advance of the meeting.

GDE/Detector Contact Group

Sakue received a proposal from Brian Foster to establish a formal group for channeling information. Sakue has proposed that this group begin by working on the planning of the Baseline Assessment Workshops which will consider the machine design changes, and as future topics are taken on new membership can be recruited.

Request for Engineering Support

In response to the offer of Rolf at the Brookhaven ILCSC meeting to try to find engineering support for detectors from the world's labs, the two detector groups have created a coordinate list of the engineering support needed. Karsten has worked out a list for push-pull, and will be discussing this with Andrei. The PAC expressed concern for how long it was taking to prepare this; it is expected to converge in 1-2 weeks.

ILD - Yasuhiro

A software and integration workshop is being planned for July 6-8 at DESY. The main issue for the software is to define strategy. The timing of simulation production depends on the choice of strategy. For integration the main issues is how to create a consistent design.

SiD - John

SiD has been working, along with ILD, to determine common, critical engineering needs. Common needs that had not been appreciated in the past were identified. The workshop at Argonne is being organized for June 3-5. The main purpose of the workshop is to re-work the work plan documents, adding realism, and re-establishing schedule. It will also help coordinate efforts with CLIC.

MDI – Karsten

Karsten reported on recent work on push-pull. A report on push-pull related requirements was prepared from the detector perspective. Working with Andrei, the machine side will be considered, and a broadened requirements list will be prepared. This will then be presented to the GDE EC for approval. The PEB will also be presented the report in parallel for approval. This is expected to happen in about 10 days.

The MDI Common Task Working Group reduced to 4 members after validation. An extension of the group is needed, and Karsten proposes adding Alain Herve and Tom Markiewicz.

Engineering Tools – Catherine

ILD will have two day meeting next week to implement CAD and document standards. Catherine will discuss options with SiD soon.

Detector R&D – (Sakue for Marcel)

Marcel and Sakue met at KEK today, and discussed how to finish the R&D document. Sakue suggests focusing on limited aspects related to SiD and ILD common interests.

Software – Akiya

Soon after Beijing LCWS a real working group on common data samples consisting of Akiya, Tim, and Mikael has been preparing a new set of programs and discussing how to share the work. There have been two meetings on LCIO, to update of data format and discuss future additions.

Physics - Michael

A new benchmarks document was recently circulated. The IDAG as well as the detector groups suggested that a shorter list of required processes for the Detailed Baseline Document be specified, and the Physics Common Task Group responded to this wish. Three processes have been proposed, two at 1 TeV (ν nubar Higgs and t tbar Higgs), and the Higgs $\rightarrow c$ cbar measurement at 350 GeV.

SB2009 - Jim

The GDE reacted to the SB2009 physics and detector study by proposing design changes to improve low energy luminosity, including increased rep rate at low energy and a revised final doublet. A new set of parameters is expected soon, perhaps in June.

Three phenomenologists have been added to the Working Group: Georg Weiglein, JoAnne Hewett, and Yasuhiro Okada.

Contact Group - Sakue

Sakue has considered the membership for the contact group proposed by Brian, and proposes the initial members be Jim (rep management), Mark Thomson (rep ILD), Tom Markiewicz (rep SiD), Karsten (rep MDI), and Keisuke (rep Physics.) With Tom and Karsten as members, there is a strong connection to MDI, which is important.

Guidelines for Detailed Baseline Design - Sakue

Sakue asks for comments on the revised guidelines for the detailed baseline design reports. All nine points have been retained, at manageable levels.

CLIC-ILC Cooperation - Sakue

The next meeting of the CLIC-ILC Cooperation group is scheduled for June 14.

Next meeting

The next meeting will be on June 29, at either 1400 or 2100 GMT.