

Physics and Experiment Board Meeting

June 5, 2012 (1400 GMT)

Minutes (prepared by J. Brau)

Present: Ties Behnke, Jim Brau, Phil Burrows, Marcel Demarteau, Juan Fuster, John Jaros, Akiya Miyamoto, Michael Peskin, Yasuhiro Sugimoto, Andy White, and Sakue Yamada and Hitoshi Yamamoto.

Excused: Karsten Buesser, Catherine Clerc

Report by Sakue

PAC Meeting

The PAC met May 15-16. In the RD report, Sakue concentrated on preparation for the DBD. He commented on the concerns people have for how the Physics & Detectors group will be organized in the post 2012 organization, particularly where there are differences in the status of the ILC and CLIC efforts.

Marty Breidenbach gave a report for SiD, Graham Wilson for ILD, and Juan on CLIC-ILC Cooperation.

The PAC minutes expressed a concern on the ILC cavity yield and the tuner reliability. The minutes express happiness with progress toward the DBD and took note of the concern for the structure of the future organization. (Two of the detector PAC members were absent.)

The new Director for the post-2012 organization will be announced by the ICHEP Melbourne meeting.

DBD Format Working Group

The group met last week. The plan for introduction and common sections was agreed to. Juan is coordinating these sections. A depository has been set up and those needing one can get an account. Drafts are due by June 22.

ILD - Ties

ILD met in Japan two weeks ago with a focus on the DBD. An outcome of the meeting was an agreement on the baseline: which technologies will be included as options and which as alternatives. Areas needing reinforcement of effort were identified. In particular, simulation and reconstruction and related studies are behind schedule. The tracking software needs optimization. There is confidence that the main production will

be completed over the summer so that analysis can be done in time for the DBD. Comparison of ILD and SiD simulation results should be possible before LCWS in Arlington, as encouraged by the IDAG.

Yasuhiro noted that a press conference was conducted before the ILD meeting and a candidate site tour was led. Good coverage came out in the local newspaper and TV service.

SiD - Andy

The timeline for the DBD was discussed yesterday by the SiD Executive Committee. Next week the section editors will meet to discuss plans. Svn has been set up. First drafts are requested by July 20. Page assignments have been made. Older samples are available for the start of physics studies, and new samples are in process of being produced.

The DBD will be a principal focus of the August 21-23 SiD workshop at SLAC.

DBD Author list - Sakue

Discussions with the GDE editors favor an inclusive author list for all volumes, as was done for the RDR.

MDI (1) - Phil

The MDI system will be described in five places in the TDR (twice) and DBD (three times). A meeting was held at TILC, resulting in good plans for these sections. Andrei will lead the TDR sections, with support from Karsten and Phil. The DBD common section is being written by Karsten, Yasuhiro, Tom and Marco. SiD and ILD will prepare their own sections. Phil will ensure complementary for the five pieces.

The MDI was reviewed during KILC. A report was made to Barry and Sakue. The access shaft evaluated in the US is rather expensive and needs to be carefully studied.

MDI (2) - Yasuhiro

The GDE review team reviewed the Japanese mountain site and commented that having only one access tunnel causes conflict. The design teams (GDE, ILD, SiD) are working on a demonstration to show how the scheme works. The review also revealed that the cryo system in the ILC central region was missing.

Detector R&D - Marcel

Work is advancing on the DBD contributions. Accomplishments are being summarized, but will have to be selective to fit the page limit. A separate document will expand on the selected version. R&D to date and R&D to come will be included in the DBD. (The IDAG suggested including the future R&D in a section near the end of the DBD.) The R&D common section is being coordinated with the ILD and SiD sections. A draft should be available by June 22.

Software - Akiya

The DBD common section was discussed at KILC and the software and generator group agreed on draft. Details will be covered in the SiD and ILD sections.

1 TeV common generator samples were produced last week. New 500 GeV samples are being produced now.

Physics – Michael

First drafts of the physics volume are planned for mid June.

A planning process is starting in the US, leading up to “Snowmass” 2013. Chip Brock and Michael Peskin are leading the energy frontier studies, in parallel with Bill Barletta who leads the facilities group. It is important for the ILC community to engage in this process.

There will be an organizational meeting at Fermilab - Oct 11-13, 2012. Some topical meeting will be organized in the spring of 2013.

Future Organization

Sakue closed the meeting by reiterating his view that the new organization should be structured closer to that of a real lab, rather than a loose organization that has been suggested by some. We have made significant progress, and we should plan the restructuring to keep our momentum.

Next meeting - June 26, 1400 GMT