

## **Physics and Experiment Board Meeting**

March 29, 2012 (1400 GMT)

Minutes (prepared by J. Brau)

**Present:** Ties Behnke, Jim Brau, Karsten Buesser, Catherine Clerc, Marcel Demarteau, Juan Fuster, Akiya Miyamoto, Michael Peskin, Yasuhiro Sugimoto, Harry Weerts, Andy White, Sakue Yamada.

**Excused:** Hitoshi Yamamoto.

### **IDAG at KILC12 in Daegu**

The DBD outlines are due at the end of March. Both groups are close to being ready to submit outlines. The interviews of the two groups at Daegu will concentrate on these outlines. The IDAG will also be interested in the updated cost estimates, cooperation with CLIC, and the status of the 1 TeV simulation. SiD will be interviewed first followed by ILD. 1.5 hours are scheduled for each group. Each group should come with a 30 minute presentation and be prepared for questions and discussion.

The IDAG will also meet separately with software and simulation people.

### **PAC at Fermilab, May 15-16**

The PAC will be interested at their May 15-16 Fermilab meeting in how the effort will be organized following the completion of the DBD.

The 2<sup>nd</sup> 2012 PAC meeting will be Dec 13-14 at KEK. A nearly final version of the DBD should be available for that meeting.

### **PEB at KILC12**

The PEB may meet on Wednesday or Thursday lunch time at Daegu.

### **Post-2012 Organization**

The ILC-CLIC Joint Working Group met February 29 and discussed the post-2012 physics and detector organization. Since the membership of this working group is limited, it may not be the best place for this discussion. CLIC is planning a new detailed management structure for physics and detectors.

Further discussion is needed by a broad fraction of the community. The WWS-OC will discuss the post-2012 organization soon.

### **ILD - Yasuhiro**

ILD is preparing their outline of the DBD, which is almost done. It will be submitted next week.

There have been several recent meetings on integration, such as that concerning the underground cavern at CERN.

ILD is discussing how to include different options into one baseline design.

It is important to learn what will be included in the common section of the DBD.

A workshop is being planned for May 23-25, with a pre-meeting on detector integration on Monday and Tuesday.

### **SiD - Andy**

The SiD outline is nearly completed.

The KILC SiD plenary talk will be presented by Tim Barklow, and Harry Weerts will present the KILC IDAG talk.

SiD is not planning a dedicated concept group meeting at KILC.

### **MDI - Karsten**

Good progress continues. The hall layout presented and discussed at the recent CERN meeting looks feasible. Higher GDE management saw this for the first time, and expressed concern for the cost. This was due to the increased complexity in the arrangement. This will be reviewed again at KILC12, where the requirements for the expanded space will need to be justified. There is a possibility that the costs might be moved from infrastructure to the detectors, if they remain high. The conventional plan had been to prepare an inexpensive surface hall and to lower big pieces down. With the Japanese “mountainous” site the size of the pieces that can be brought in are smaller, leading to a requirement for underground assembly. This is a bigger issue for ILD than for SiD. This aspect also impacts schedule. The cost for the TDR should be no greater than the RDR, constraining the possibilities.

## **Engineering Tools - Catherine**

A presentation by the new DESY hire is planned for the upcoming ILD meeting. A meeting with SiD will also be arranged.

## **Software - Akiya**

Most of the 1 TeV samples have been produced. The 6 fermion samples are yet to be completed.

500 GeV is under discussion. ILD is interested in looking at  $t\bar{t}$ .

## **Physics - Michael**

Many searches were updated with only 2 fb<sup>-1</sup> of the 5 fb<sup>-1</sup> of data at Moriond. Many searches are taking more time. Michael expects the main impact of the ICHEP results to be limited to the Higgs search: it will either be established, or ruled out, in which case nothing will have been found by then.

The European Strategy Study is proceeding. An open symposium is scheduled for September 10-12 in Krakow. Written material is due by July 31. A panel has been set up by the Europeans to submit a statement on linear colliders, led by Francois LeDiberder.

In the US, planning for a Snowmass workshop in 2013 (June 2-22) is beginning. The coordinators are:

- Chip Brock and Michael Peskin - Energy Frontier
- Harry and JoAnne - Intensity Frontier
- Johnathan Feng and Steve Ritz - Cosmic Frontier
- Marcel Demarteau and Howard Nicholson - Instrumentation
- Bill Barletta and Gil Gilchriese - Facilities

A Snowmass preparatory meeting is planned for Oct 11-13 at Fermilab.

In Japan, a planning meeting is schedule in the Autumn for all scientific projects.

## **Next meeting**

The next meeting will be in person during KILC12 in Daegu in April.