

## **Physics and Experiment Board Meeting**

February 28, 2012 (1400 GMT)

Minutes (prepared by J. Brau)

**Present:** Ties Behnke, Jim Brau, Karsten Buesser, Juan Fuster, John Jaros, Akiya Miyamoto, Michael Peskin, Yasuhiro Sugimoto, Andy White, Sakue Yamada, Hitoshi Yamamoto.

**Excused:** Catherine Clerc, Marcel Demarteau.

### **Research Director's Report**

The ILCSC met in Oxford February 2. The main topic of discussion was the post-2012 organization. The mandates for Director and Associate Directors (ILC, CLIC, and Physics and Detectors) were drafted. Eventually, the ILCSC will recruit a Director, and then Associate Directors.

The structure of the post-2012 Physics and Detector organization remains to be defined. The ILC-CLIC Joint Working Group will meet tomorrow, and may discuss this. However, that group may be too small to make good progress. The membership includes representatives from ILD (Mark Thomson), SiD (Marcel Stanitzki), R&D (Marcel Demarteau), RD Management (Juan and Sakue), and CLIC (Lucie and Felix Sefkow). It might be possible to expand this group for this discussion. The WWS-OC should also begin discussion on the post-2012 organization, which would be helpful.

### **Costing working group**

Sakue expected an updated list of costs in February, but they have not yet been produced. It is hoped they will be soon.

### **Detailed Baseline Design**

The 2nd meeting of the format working group was held. The deadlines were agreed to. An outline will be submitted for the IDAG meeting in Daegu in April. The first draft will be submitted one month before LCWS in October. Final documents will be ready before Christmas (perhaps December 21). The minutes of the formatting group will be posted on [linearcollider.org](http://linearcollider.org).

Sakue, Hitoshi, Juan, and Jim were invited to a GDE EC meeting to discuss the TDR schedule. Sakue will forward the GDE schedule to the PEB. The GDE plans to have the completed draft ready for review by November, 2012. The November PAC meeting has

been shifted to December, and the TDR will be reviewed at that meeting. We should attempt to submit a nearly finished version of the DBD for the December PAC meeting.

The next PAC meeting is 15-16 May at Fermilab.

### **Physics volume - Michael**

It is Michael's goal to produce a draft of the physics volume before the end of August. It will then be revised in light of later developments at the LHC. The length will be about 80 page.

### **ILD - Ties**

ILD is organizing for the DBD. The first draft will be available by the end of September, and will be given to the IDAG for discussion at LCWS in October.

They are preparing for a meeting in May.

It has not been possible to prepare updated costs so far, and a date certain for these is not known. It is hoped they will appear for KILC12.

### **SiD - Andy**

Recent funding news in the US has not been good. After the 5 year successful program of the GDE to develop the ILC TDR no more funding is planned. It is hoped that some mechanism for continued support will be found.

Recent discussions with DOE on detector R&D have not been encouraging.

The editorial team for the DBD is set up. Marcel S. has prepared the svn system to maintain updated versions. A skeleton outline exists and will be updated for the IDAG by the end of March.

Marty Breidenbach has been updating costs.

### **MDI - Karsten**

A webex telecon is planned next Friday to discuss how the MDI common issues should be addressed in the DBD. This will include push-pull, underground experimental areas, and related topics.

The MDI group is working with the GDE CFS group on the experimental hall design. Attention has turned to the mountainous site. A CFS review is scheduled for March 21-23 at CERN

### **Software - Akiya**

Generation of event samples for 1 TeV benchmark studies is under way. 2 fermion and 4 fermion samples have been produced and placed on the grid, along with t tbar samples. The 6 fermion samples are being prepared by CERN collaborators and are expected by March. The number of events to simulate and needed for backgrounds must still be defined. This will be discussed and decided by ILD and SiD together. Detector simulation may start soon.

### **Physics - Michael**

The plan for the physics report for the DBD is coming along. Outlines for all chapters are being prepared. The ICHEP results will have a big impact on what is included.

### **KILC12 - Akiya**

The program for KILC12 is shaping up. Parallel sessions are being reserved for the ILD and SiD detector groups (SiD does not plan to meet) on the morning of the last day. Regarding KILC12, Sakue informed that the IDAG will meet on the 2<sup>nd</sup> and 3<sup>rd</sup> days and they will interview with detector groups, concentrating on the DBD outlines.

### **Next meeting**

The PEB will meet again around the last Tuesday of March.