

Physics and Experiment Board Meeting

September 1, 2009 1400-1600 GMT

Minutes (prepared by J. Brau)

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

Absent: Marcel Demarteau.

IDAG Recommendations

Sakue has received the final report of the IDAG. The recommendation was for ILD and SID to be validated. 4th did not receive a recommendation for validation. Detector R&D on dual readout calorimetry was encouraged.

ILCSC Meeting in Hamburg

At the August 19 ILCDC meeting, Augustine gave a PAC report. There was a long discussion on ILC-CLIC cooperation.

Francois reported for the WWS. He specifically urged the ILCSC to support the timeline, noted the large regional imbalance in support, and asked ILCSC to express recognition of the importance of the R&D efforts. The ILCSC requests more precise priorities, with clear picture of what important outcomes might be in danger.

Sakue reported on the validation process and the IDAG report. The ILCSC endorsed Sakue's plan to accept the IDAG recommendations. Sakue presented the work plan through 2012, and urged the ILCSC to help find the resources to realize it. The ILCSC did not respond. Sakue will request support directly from the funding agencies.

The next ILCSC meeting is February 25, 2010 at Brookhaven.

Related to this, the next PAC will be in Spain, either Madrid or Valencia, likely between May10-21.

Physics and Experiment Board Reorganization

Sakue informed each of the three detector design groups of the IDAG recommendations and his acceptance of their main conclusions.

The Physics and Experiment Board will now be reorganized for the next phase, based on the two validated groups. The representatives of 4th were invited to this meeting, with the understanding that it would be their last. They chose not to attend.

PAC Meeting in Pohang

The main agenda item for the detector session of the PAC meeting in Pohang on the 2nd day of the November 2-3 meeting will be validation. Michel Davier (IDAG chair) will be invited. Sakue will report on the plans for the validated groups. There will be reports from the common task working groups. The MDI topic will be covered both days, from the machine perspective on the 1st day, and from the detector side on the 2nd day. Karsten is unable to come. Phil will be invited, as deputy, to present MDI report when he is available. Marcel will try to come, Michael cannot (may report by phone), Catherine cannot, and Akiya will come.

GDE Executive Committee

The GDE has wanted to add a member from the detector community to the GDE Executive Committee for some time, with the expansion of the membership. A European (Delahaye, CLIC) has been added, an American (Garbincius, costing), and an Asian addition (detector) would maintain regional balance. Tauchi has been recommended from the detector community. When he is accepted by GDE-EC, Tauchi will inform the Physics and Experiment Board of relevant detector issues that arise in the GDE EC deliberations. In doing so, he may bring special sensitivity to MDI issues because of his expertise. It will be important, however, to respect the formal channels of communication, namely that MDI issues are addressed through the common task working group leadership (Karsten and Phil).

Sakue is also proposing that a regular communication between the GDE EC and the RD.

Detector R&D Plans

Sakue requests an updated R&D plan from each of the validated detector groups by the October Physics and Experiment Board meeting.

Report from each common task group

MDI Common Task Working Group (Karsten Buesser)

Karsten reported on the follow up to the SLAC meeting. There is an agreement with the BDS group to invest in detector vibration studies. A work plan, with milestones, will be drafted. The plan will be discussed at the Albuquerque ALCPG meeting. There was discussion regarding the level of additional help needed, and whether the detectors should be requesting support from the GDE for engineering. Karsten did not think this was necessary, feeling that the necessary level of effort exists.

Engineering Tools Common Task Working Group (Catherine Clerc)

Catherine reported that she is visiting DESY at the end of September to meet with Lars Hegge to discuss issues.

Detector R&D Common Task Working Group (Marcel Demarteau)

No report on detector R&D

Software Tools Common Task Working Group (Akiya Miyamoto)

A Wiki web page is now available. It is

http://www.linearcollider.org/wiki/doku.php?id=swctwg:swctwg_home

Physics Common Task Working Group (Michael Peskin)

Michael will give a plenary report in Albuquerque at the ALCPG meeting.

ILD (Ties and Yasuhiro)

The validation was well received. ILD is now trying to understand the next steps. Albuquerque will be an important meeting to discuss this. A dedicated ILD meeting will be held late in the year, or early next year.

SiD (John and Harry)

SiD is re-evaluating the future direction. The immediate focus is to come up with a plan; this will be discussed in Albuquerque. Through the summer there has been activity particularly in the R&D planning, PFA studies and meetings, and discussions on how to collaborate with the CLIC group. Resources are a major issue, requiring a firm timetable leading to 2012/13.

Reorganization

Sakue reported that the members of the Physics and Experiment Board and the common tasking working groups representing 4th will be stepping down. The deputy convener of the R&D group is from 4th, and will need to be replaced. Consideration should now be given to adding more members from the two validated detector groups to the common task working groups to maintain the needed strength. Catherine indicated the engineering tools working group would like to add members, and Sakue asked ILD and SiD to consider nominees for that group. Michael asked if particularly active members representing 4th on the physics working group could continue as members. Sakue said he would entertain such a request since new members could be added with the agreement of the PEB; Michael should send an email with a proposal for future membership. Akiya asked that another member of SiD be nominated to join the software working group.

Collaboration with CLIC

Barry presented the draft Statement of Common Intent by the CLIC Steering Committee and the ILC Global Design Effort at the ILCSC meeting, and it generated a lot of

discussion. It was agreed that such a statement should be signed by the ILCSC and the CLIC Board. The GDE also presented a joint working group on general issues. This was approved, with the comment that it focuses on technical issues, and avoids policy. The RD was encouraged by the ILCSC to continue cooperation with CLIC on detector R&D, and create a joint working group on detector issues. Sakue has prepared a draft mandate for a Joint Working Group on General Detector Issues. This draft was discussed, and after some modifications, was agreed to. He will hand it to ILCSC for approval.

Complementarity

The Board discussed detector complementarity.

Next meeting

The next meeting will be over lunch on October 2 in Albuquerque.