

Research Director's Report

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Sakue Yamada

Detector activities reviewed by the PAC

On 9 and 10 May, the second review meeting of the Project Advisory Committee (PAC) of the ILC was held in Vancouver. Its first meeting was last year in October when we were about to complete the entire framework of the detector activity. At that time PAC endorsed the designed management structure and the way we intended to proceed, which gave us confidence to start most of the common task groups during the LCWS08 meeting in Chicago in November.

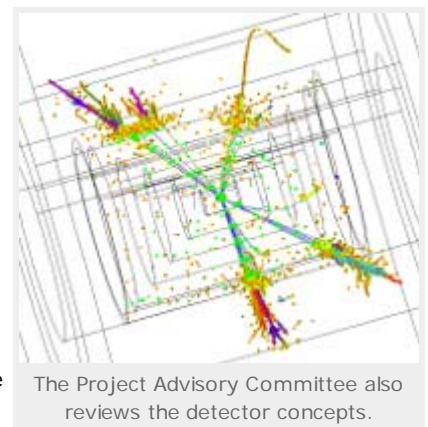
The second PAC meeting was timely after half a year's activity of the common task groups. Another big event for us to report this time was the submission of the three Letters of Intent (LOI) and its intensive validation activity underway by the International Detector Advisory Group (IDAG). A half-day session was attributed for the physics and detector activities. I gave an overall report on the status of the activity in general, including brief descriptions of each

Letter of Intent, the plan of IDAG for validation and the schedule of detector activity after validation. Detailed reports of the four common task groups, which made various accomplishments during the last half a year, were presented by each of the conveners or deputy conveners. Karsten Büßer reported on the activity of the Machine-Detector Interface group, in particular on the interaction region interface document and on the push-pull studies. Catherine Clerc presented the activity of the Engineering Tool group. Marcel Demarteau of the Detector R&D group described the group's mandate, plan and described critical R&D areas identified by each LOI group. Norman Graf reported on the activities of the Software Common Task group, which completed a lot of work for the benchmark simulations of the LOIs. The physics panel found the given date inconvenient this time and wanted to wait until the next meeting, when they will have finished the on-going physics case studies which they planned last November.

I am glad to say that PAC was pleased with the reported progress and appreciated the effort of the ILC physics and detector community. In the final comments and also in the minutes, some remarks were given more specifically. The PAC noted the important work being carried out by all the common task groups and it was impressed with the current status of the LOI process, in particular that the three LOIs were delivered on time and that the validation process is moving swiftly. While there was not a presentation, the PAC appreciated the study of the Physics Panel of a possible gamma-gamma collider Higgs factory as a precursor to the ILC.

There were also requirements and suggestions to guide us. Following the completion of the validation process later this year, a plan should be formulated to arrive at a detailed design of the detectors by 2012. Acknowledging that there are already accomplishments and on-going efforts, the PAC considers the push-pull concept very important and encourages even more discussions on this issue among the various groups involved. PAC commended the detector R&D panel for its work so far and pointed out that it is important to make the best use of the less-than-ideal R&D funds currently available and to avoid unnecessary duplication of efforts.

These recommendations confirmed the importance of the issues which we also discuss among ourselves and urge us to investigate more intensively on these points. Now the IDAG is in the middle of extensive examination of the LOIs and the detector groups are quite occupied to respond to additional questions and interviews. On the other hand, the submitted LOIs can be regarded as their work plans for further R&D projects and physics studies. The detector groups



The Project Advisory Committee also reviews the detector concepts.

are trying hard to carry out this work over the validation. After the PAC meeting, we began to discuss a more concrete scenario at the Physics and Experiment Board about what should be accomplished by the validated detector groups through 2012 and what the intended baseline design report should contain. The process has not been finalised and some issues like securing resources were also raised. We will work on this for a while along with the IDAG's examination of the LOIs.

-- *Sakue Yamada*