

Research Director's Report

16 October 2008



All common task groups are ready to start

Following the discussions with the representatives of the groups preparing the letters of intent (LOI) and the members of the common task groups during the European Committee for Future Accelerators (ECFA) [workshop](#) in Warsaw, we have been working to reinforce the two common task groups, the detector R&D Panel and the Physics Panel, by inviting more members outside the LOI group community. During the same workshop, the Worldwide Study WWS decided to stop their panels in order to avoid overlapping of activities. This decision gave us another reason to strengthen the common task group and to expand its role. Everybody thought that the expected physics consideration of the Physics Panel would be better conducted with a wide scope, which can be brought in by theorists and experts in other fields.

Regarding the detector R&D common task group, we wished to have a good link with the detector R&D collaborations. A question was how to establish it. There are many detector collaborations for different types of detectors. They are independent, some are closely coupled to ILC-oriented R&D and others have scopes for different fields and even wider applications. The LOI groups cooperate with those collaborations working on the technologies which are considered in their detector design. Under this circumstance, it was not simple to decide which collaboration to approach. After consulting the LOI groups, we contacted major detector R&D collaborations for suggestions. To our pleasure, most of the collaborations responded, and some offered to send an additional representative to the common task group. Since many of the R&D work of the LOI groups is conducted in collaboration with these R&D collaborations, closer link and good communication between the LOI groups and the R&D collaborations will be extremely useful. Having collaborations of different detector components in this common task group is an advantage: an overview of the entire status of the detector R&D can be obtained in an organised way. Since the LOI groups will need to present their R&D plans in their letters of intent, such information will be valuable for them. Such a survey will be one of the first programmes of the Detector R&D Panel.

Regarding the Physics Group, we asked each regional ILC community to suggest candidates for additional members. We requested one theorist and one experimentalist from each region to join. With these new members, together with the original experts from the LOI groups, the group became stronger and will be able to enrich its work. The purpose of the group is to study the physics capability of linear collider experiments through investigating possible scenarios. Once LHC brings results, the community should ask what will be the best strategy to take, particularly where to set the initial energy of the collider. Such considerations will involve many elements and this group is expected to provide the physics scenarios for different cases. The group will survey as many possibilities as considerable for the ILC. While much effort has already been made and a lot of material is available, we do not want any likely case left untouched. Although the focus of the group is on the ILC physics, the community expect the group to also have a scope for the longer future. Depending on what the LHC brings, it will become interesting to understand how to extend the e^+e^- physics beyond ILC. In view of the activity on CLIC physics, some cooperation or exchange of information may also be made through this group.

Both common task groups, the detector R&D Group and the Physics Group, will start soon. I hope that the groups start working on relatively simple tasks, which will allow them to become active as soon as possible.

-- Sakue Yamada