

Research Director's Report

17 January 2008



Sakue Yamada

The new phase on track

Last October we started a new phase in planning the ILC experimental programme after many years of coordination through the World Wide Study. Following a few months of discussion, we are now ready to put the new phase on track. At this critical moment, we are forced to face some unanticipated difficulties—the recent budget cuts in the UK and US. These will affect the speed of progress to a certain extent, but we are determined to move forward. Steady preparation continues.

The impact of these difficulties on the ILC timeline will likely be discussed in the February International Linear Collider Steering Committee meeting based on a detailed investigation of the Global Design Effort on the influence of the cuts on accelerator R&D. The physics and detector community appreciates the intense effort and determination to maintain the timeline as close as possible to the original plan. Once a new schedule is decided, we will adjust the detector timeline

flexibly so we continue to work in a well synchronised way for the next phase.

Recently we made another step which I described in [November](#): the management structure has been designed and the International Detector Advisory Group (IDAG) members have been nominated.

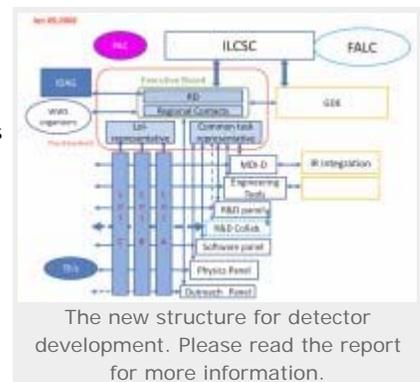
The management structure is designed to fulfil several requirements. Firstly it needs a good communication link both to the physicist community of the world and to the GDE. It should also facilitate smooth collaboration among groups of scientists who are planning to submit Letters of Intent (LOI) for detector and software development. We hope the structure shown in the figure meets these requirements.

I am joined in a central Executive Board by three regional contacts. The size of this board is small for easy and frequent contact among the members, yet it has direct links to the physicist community of each region. In order to ensure smooth continuation from the ongoing activities, I asked the three co-chairs of the WWS-Organisation Committee to serve as initial regional contacts. This request was endorsed by the corresponding steering body of each region, and the co-chairs each agreed to work with me. They are James Brau for the Americas, Francois Richard for Europe and Hitoshi Yamamoto for Asia. We have been meeting via teleconference nearly every week for a few months now.

After identifying the LOI groups, several common task groups will be formed, which all the LOI groups will join to work together. For instance, the Machine-Detector Interface group will communicate with the corresponding group of the Interaction Region Integration of the GDE on various matters of the accelerator-detector link. An Engineering Tools group will communicate with a GDE group to have common design tools so that the same methodology is used in preparing for the EDR. A Detector R&D Panel discusses or organises matters which require common efforts like exchange of information through workshops, searching for test beams and/or identifying areas of work sharing. It should maintain good communication with the detector R&D groups. A Software Panel may be useful in arranging common simulation tools. A Physics Panel will investigate our basic strategy regarding physics and work jointly with theorists. The representatives of the LOI groups and the chairs of the common tasks will form the Physics and Experiment Board.

The next step will be the identification of the groups which will prepare LOIs and participate in the common task groups. We will do this as soon as the new schedule of the EDR preparation is determined.

The ILCS approved the nomination of IDAG. The IDAG consists of experienced collider experimentalists, phenomenology theorists and ILC accelerator experts, chosen to achieve a regional balance. The majority of the IDAG members will come from outside the ILC community. In order to acquaint them with the requirements and the status of detector R&D, we plan to invite them to the next workshop, [TILC08](#), the Joint ACFA Physics and Detector Workshop and GDE Meeting on the



International Linear Collider, in Sendai in March.

While we are dealing with political challenges, our scientific and technical efforts continue, and we are confident that our goals remain achievable.

-- *Sakue Yamada*