

AsiaHEP/ACFA Statement on the ILC

After the discovery of a new Higgs boson at the Large Hadron Collider (LHC), the quest for the physics beyond the Standard Model has entered a new phase. The detailed study of the Higgs boson with the unprecedented precision of a next generation electron-positron collider is widely accepted as the best solution to clarify the underlying physics of the electro-weak symmetry breaking. The electron-positron collider will not only complement the LHC, but will also advance physics beyond the LHC.

By the end of 2012, the Global Design Effort (GDE) had completed the Technical Design Report (TDR) of the ILC accelerator and the world HEP community has completed the Detailed Baseline Design (DBD) of the detectors. The completion of these documents demonstrates the feasibility of the ILC accelerator and detectors. Hundreds of researchers from the Asia and Oceania region have participated in the TDR/DBD activities and have made significant contributions.

Meanwhile the HEP community in Japan, represented by the Japan Association of High Energy Physicists (JAHEP), has issued a proposal for the ILC, commencing with the center-of-mass energy of 250 GeV, to study in detail the properties of the Higgs boson. The ILC is to be upgraded to higher energies following initial operation, making the best use of the energy extendibility of the linear collider. JAHEP also proposed that the ILC be hosted in Japan as a global project.

In recognition of the JAHEP's proposal, KEK states in its "KEK Roadmap 2013", finalized in May 2013, that KEK would play a central role in the preparatory works of the ILC to be hosted in Japan.

In China, the community has reached a consensus during the so called Fragrant Hill meeting in June 2013, that ILC should be strongly supported and that requests to funding agencies should be started soon.

Considering the above situation, Asia-Pacific High Energy Physics Panel (AsiaHEP) discussed the ILC related issues at the 3rd meeting, held in parallel with the 12th Asia-Pacific Physics Conference at Makuhari, and came to the following conclusions, which will be reported to the Asian Committee for Future Accelerators (ACFA) for endorsement.

AsiaHEP/ACFA deems that a next generation electron positron collider allowing a detailed study of the Higgs boson and capable of being upgraded to the TeV energy scale will provide an unparalleled opportunity to explore the Higgs boson and physics beyond the Standard Model.

AsiaHEP/ACFA acknowledges the technical feasibility of the ILC based on cold technology has been demonstrated with the completion of the TDR after eight years of concerted and persistent efforts coordinated by the International Linear Collider Steering Committee (ILCSC) and the GDE.

AsiaHEP/ACFA believes that the ILC is the most promising electron positron collider to achieve next generation physics objectives.

Considering the broad support for the ILC from the worldwide HEP community, including many research groups in the Asia-Oceania region, and considering the size and the complexity of the accelerator, the ILC will inevitably be realized as an international cooperative endeavor. AsiaHEP/ACFA therefore supports the activities at the Linear Collider Board (LCB) and the Linear Collider Collaboration (LCC), recently established by the International Committee for Future Accelerators (ICFA) to coordinate and promote the ILC. AsiaHEP/ACFA also supports the preparatory work at KEK.

AsiaHEP/ACFA welcomes the proposal by the Japanese HEP community for the ILC to be hosted in Japan. AsiaHEP/ACFA looks forward to a proposal from the Japanese Government to initiate the ILC project.

Considering the situation in which accelerator science is rapidly growing and related technologies are building in Asia-Oceania region, the participation in a cutting-edge accelerator project, such as the ILC, will accelerate the benefits to the whole accelerator science as well as to high energy physics in this region.

AsiaHEP/ACFA will make every effort to promote the ILC, especially in Asia-Oceania region.

Date and Signature

The 1st of September 2013

A handwritten signature in black ink, appearing to read 'M. Nozaki', written in a cursive style.

Mitsuaki Nozaki

Chair of the Asian Committee for Future Accelerators (ACFA)

Chair of the Asia-Pacific High Energy Physics Panel (AsiaHEP)