

Status of the IDT

-Activities of the International Development Team (IDT)-
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Tatsuya Nakada

EPFL, Switzerland

Chair of the IDT Executive Board

Contents

1. Start of IDT in 2020
2. Pre-lab proposal work: 2020-2021
3. Since then
4. IDT work Towards the European Strategy

1) Start of IDT in 2020

After deciding to move forwards with the ILC project in February 2020, the ICFA established International Development Team (ITD) in August, hosted by KEK, to support the Japanese HEP community who had proposed to host the ILC in Japan as a global project, to pave a way for the preparatory phase.

The primary task of the IDT was identified as establishing the ILC Preparatory Laboratory (Pre-lab) in Japan to prepare the engineering design and to assist the international government discussion to reach a decision of the construction and operation of the ILC. In parallel, it should facilitate the activities of the accelerator and physics/detector communities. The IDT consists of

Executive Board and three working groups: (organisation was shown by S. Michizono)

- Working Group 1: Giving advices for founding the ILC Preparatory Laboratory, Pre-lab:
- Working Group 2: Forum of the accelerator community interested in the ILC:
- Working Group 3: Forum of the community interested in ILC physics:

2) Pre-lab proposal work: 2020-2021

The IDT proposed to create the Pre-lab, as a collaborative effort of laboratories worldwide largely based on the in-kind contribution with a small central management team in Japan:

- Inspired by the HEP experiment framework
- Prototype for a global project

Pre-lab proposal published in June 2021 describes the scope, organisation, technical work packages for the accelerator and site, resource requirement and time scale.

Conclusions of the MEXT ILC Advisory Panel on the proposal includes

- “..., the panel found that it is still premature to proceed into the ILC Pre-lab phase, which is coupled with an expression of interest to host the ILC by Japan as desired by the research community proposing the project.”
- “The panel recommends that the development work in the key technological issues for the next-generation accelerator should be carried out by further strengthening the international collaboration among institutes and laboratories, shelving the question of hosting the ILC.” (from the KEK announcement)

3) Since then (I)

Move forward with limited but time critical accelerator work selected from the Pre-lab proposal work packages: ILC Technology Network (talk by S. Michizono) was setup

- Workplan and framework worked out over 2022 and 2023
- KEK successfully obtained additional funding and started collaborative work with European laboratories (CERN as the hub-laboratory) and Asian laboratories.
- US laboratories as observer to solve the funding issue.

Analyse the sustained difficulty in initiating the intergovernmental discussion and seek a way forward: International Expert Panel was setup and concluded as

- The ILC started as a “global” project. After the Japanese HEP community proposal to host the ILC in Japan as a global project, foreign partners have been hoping, encouraged by various positive statements from the Japanese politicians, that the Japanese government would express its interest to host as a start of discussion.
- Japanese government considers that as a global project, a consensus on building the ILC among the international partners must be reached first before discussing the host issue.

3) Since then (II)

The Japanese community consider that reaching such a consensus on the global approach is imperative to move to the Pre-lab phase.

The current Japanese HEP community approach; see M Ishino's talk



This process at a government level would be very useful even for the other future very large projects in general, to exploit the global resources. In the current situation where the next CERN project is in focus, it is not likely for Europe to take a lead in initiating a consensus building of a global Higgs factory project. Could Japan take an initiative? What can we do to help to this to happen?

4) IDT work Towards the European Strategy

The ILC 250 GeV cost was estimated in 2017. IDT recognises the needs of an updated cost for the European Strategy Discussion. **The updated cost is now being reviewed by an international experts.** → Detail presentation by A. Yamamoto

The IDT will prepare a document (10 p) to be submitted with the following contents:

- 1) General introduction
- 2) Status of the ITN work
- 3) Updated ILC cost for the 2024 cost.
- 4) Japanese community plan for the ILC (in collaboration with ILC-Japan)

and some documents for detail and continues to provide necessary information in the strategy discussion process.

The IDT will follow the LC vision discussion where WG2 and WG3 activities will naturally provide inputs.