EPS-HEP2021 conference



Contribution ID: 863

Type: Parallel session talk

Preparing the ILC accelerator project - an International Pre-Lab

Wednesday 28 July 2021 16:45 (20 minutes)

The International Linear Collider (ILC) is a superconducting e^+e^- collider with a centre-of-mass energy of 250GeV, upgradeable in in energy to 500GeV and beyond, and in luminosity by factors of 2 to 4. At 250GeV, it will run as a Higgs factory, the worldwide top priority in future HEP projects. It will be located in the Kitakami mountains in Japan's Tohoku (northwest) region.

In 2020, the International Development Team (ITD) hosted by KEK has been established by ICFA to plan the Preparatory Laboratory (Pre-Lab) for a start in 2022. The Pre-Lab will coordinate further R&D work of critical items and prepare the actual construction of the ILC, with a target to be ready for construction in 2026, and first physics by 2035.

After briefly recalling the ILC accelerator concept we report on the Engineering Design plans for the Pre-Lab phase, and the Technical Preparation plan, which focusses on superconducting technology and nanobeams, plus further R&D on sources, in particular the positron source, and dumps. The status of the International planning for the technical work contained within the Pre-Lab phase will be summarised.

Collaboration / Activity

DESY

First author

Email

Primary authors: LIST, Benno (IPP (Info-management Prozesse u. Projekte)); Dr MICHIZONO, Shinichiro

(KEK); Prof. NAKADA, Tatsuya (EPFL Lausanne); STAPNES, Steinar (CERN)

Presenter: LIST, Benno (IPP (Info-management Prozesse u. Projekte))

Session Classification: T13 - Accelerator for HEP

Track Classification: Accelerators for HEP