



SPEAKER: **LINSSEN, L. (CERN)**

TITLE: **Physics at CLIC**

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PLACE: 503-1-001 - Council Chamber

ABSTRACT

The Compact Linear Collider (CLIC) is a high-energy $e+e-$ collider under development. The CLIC conceptual design report, published in 2012, concentrated on 3 TeV centre-of-mass energy. At that time operation at lower energies was not yet studied at the same level. Following the discovery of the Higgs boson, the CLIC potential for precision Higgs measurements was addressed for several centre-of-mass energies. In parallel, the scope for precision top quark physics was further explored. As a result an optimised CLIC staging scenario was defined in collaboration between accelerator and detector experts. The staging scenario aims at a maximum physics output and maximum luminosity yield with a collider built and operated in three energy steps: 380 GeV, 1.5 TeV, 3 TeV. The seminar will comprise a short status report on the CLIC accelerator and detector. Emphasis will be on the CLIC physics potential for Higgs, top quark and BSM physics in the new staging scenario.