

Abstract Submitted
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Overview of the Compact Linear Collider (CLIC) project and its physics potential PHILIPP ROLOFF¹, CERN, CLICDP COLLABORATION, CLIC COLLABORATION — The Compact Linear Collider (CLIC) is a proposed TeV-scale high-luminosity electron-positron collider. For an optimal exploitation of its physics potential, CLIC is foreseen to be built and operated in three stages, with centre-of-mass energies ranging from 380 GeV up to 3 TeV. Electron beam polarisation is provided at all energies. The initial energy stage will focus on precision measurements of Higgs-boson and top-quark properties. The subsequent energy stages enhance the reach of many direct and indirect searches for new physics beyond the Standard Model and give access to the Higgs self-coupling. The CLIC accelerator design is based on a two-beam acceleration scheme with normal-conducting acceleration structures reaching 100 MV/m. Following many years of beam simulations, component tests, large-scale system tests and design optimisation, CLIC recently produced a comprehensive overview of its physics case, the accelerator design and the detector to the European strategy process. The talk will provide an overview of the CLIC project and its physics potential.

¹The presenter will be nominated by the CLIC and CLICdp collaborations after acceptance of the contribution.

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