

The FCC-ee Lepton Collider: Design Status and Operation Concept

Saturday, July 7, 2018 9:00 AM (18 minutes)

The Future Circular Collider (FCC) Study aims at developing a large-scale accelerator research infrastructure based on a 100 km tunnel. While the ultimate goal is a proton-proton collider, with 100 TeV centre-of-mass collision energy and unprecedented direct discovery potential, the initial project stage could consist of an electron-positron collider, with highest luminosities at collision energies up to 380 GeV, for indirect exploration of the energy scale up to 100 TeV via precision measurements.

The talk provides an overview on the lepton collider design. Special emphasis is given to the parameter and luminosity optimisation, the operation phases and the corresponding evolution of the machine in terms of RF staging for the different physics working points, and the overall duration of the physics program.

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