

BSM searches at CLIC

Saturday, July 7, 2018 6:15 PM (15 minutes)

The Compact Linear Collider (CLIC) is a mature option for a future electron-positron collider operating at centre-of-mass energies of up to 3 TeV. CLIC will be built and operated in a staged approach with three centre-of-mass energy stages currently assumed to be 380 GeV, 1.5 TeV and 3 TeV. This talk discusses the prospects for CLIC to make direct and indirect measurements, or limits, of physics beyond the Standard Model. New particles can be discovered in a model-independent way almost up to the kinematic limit. Compared with hadron colliders, the low background conditions at CLIC provide extended discovery potential, for example in the case of non-coloured TeV-scale SUSY particles. In addition to studying new particles directly, BSM models can be probed up to scales of tens of TeV through precision measurements. Beam polarisation allows to constrain the underlying theory further in many cases.

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Session Classification: Beyond the Standard Model

Track Classification: Beyond the Standard Model