

Higgs physics possibilities at a Muon Collider

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Muon collisions at multi-TeV center-of-mass energies are ideal for studying the Higgs-boson properties. The number of produced Higgs bosons will allow to measure its couplings to fermions and bosons with an unprecedented precision. At \sqrt{s} of the order of or greater than 10 TeV the double (triple) Higgs-boson production rate will be sufficiently high to directly measure the parameters of trilinear (quadrilinear) self-couplings, enabling the precise determination of the Higgs boson potential.

In this contribution a study of the $\mu\mu \rightarrow H\nu\nu$ and $\mu\mu \rightarrow HH\nu\nu$ processes, where the Higgs bosons decay in two b-jets, is presented based on the full simulation of the detector with an evaluation of the beam-induced background.

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Secondary track (number)

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