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A US-based future collider initiative for physics prospects and detector R&D

The community, as emerged from the Energy Frontier report, supports the possibility of a Higgs factory and the R&D for a future muon collider in the US. Indeed, given global uncertainties, consideration should also be given to the timely realization of a possible domestic Higgs factory, in case none of the currently proposed options are realized.

In general, the investment in detector and collider R&D for lepton facilities in the US should start now, and run in parallel with the LHC to enable a future e^+e^- precision electroweak program and a high-energy machine. The opportunity to work on fundamental problems while using state-of-the-art technologies, and develop them as necessary, is the leading motivator for the students. A US-based future collider program can provide the much needed impetus to make particle physics programs attractive to the young and future generations in the US.

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