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https://muoncollider.web.cern.ch

# A short summary of the muon collider facility prospects

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**Abstract**
Muon colliders provide a unique route to deliver high energy collisions that enable discovery searches and precision measurements to extend our understanding of the fundamental laws of physics. The muon collider design aims to deliver physics reach at the highest energies with costs, power consumption and on a time scale that may prove favorable relative to other proposed facilities. In this context, a new international collaboration has formed to further extend the design concepts and performance studies of such a machine. This effort is focused on delivering the elements of a $\sim$10 TeV center of mass (CM) energy design to explore the physics energy frontier. The path to such a machine may pass through lower energy options, currently a 3 TeV CM stage is considered. Other energy stages could also be explored, e.g. an s-channel Higgs Factory operating at 125 GeV CM. We present a brief summary of the muon collider status and goals with a list of key challenges.