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## **Muon Colliders I**

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A muon collider would enable the big jump ahead in energy reach that is needed for a fruitful exploration of fundamental interactions. The challenges of producing muon collisions at high luminosity and 10 TeV centre of mass energy is being investigated by the recently-formed International Muon Collider Collaboration. This Review summarises the status and the recent advances on muon collider facility design. The challenges in producing intense proton beams, using them to make pions and muons and subsequent cooling, acceleration and collision are described.

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