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Update design for the Muon Collider Proton Complex

Wednesday, October 22, 2025 2:00 PM (30 minutes)

The proton complex is the first piece in the Muon Collider, it comprises a high power acceleration section, a compressor and a target delivery system. For the International Muon Collider Collaboration (IMCC) we are investigating two possibilities: a 5 GeV (2 MW) and a 10 GeV (4 MW) final energies. In this work we present the updated design for the proton complex, including chopping schemes for the linac, an investigation on the use of an RCS for reaching the final energy and a refinement of the simulations for the accumulator and compressor sections.

Footnotes

Funding Agency

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Yes

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