Contribution ID: **289** Contribution code: **FRXD01** Type: **Invited Oral Presentation**

Progress towards the US-based muon collider

Friday 15 August 2025 09:00 (30 minutes)

A multi-TeV muon collider has the unique potential to provide both precision measurements and the highest energy reach in one machine that cannot be paralleled by any currently available technology. There has been significant physics interest on Muon Colliders recently as indicated by the formation of the International Muon Collider Collaboration but also the recent P5 report. This study describes a possible set of R&D and deliverables of the muon collider accelerator R&D program in the U.S. We describe high-priority studies to be performed in the first phase that will address critical questions for deciding the future plan for a muon collider design. The goal of these studies is to firm up choices for the most challenging components of a muon collider design, and to propose and begin testing and prototyping of components and systems that are needed to have confidence in and inform our specification choices. Key areas wherein the US can provide critical contributions to the newly formed international muon collider collaboration will be discussed as well.

Please consider my poster for contributed oral presentation

Yes

Would you like to submit this poster in student poster session on Sunday (August 10th)

No

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

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Session Classification: FRXD: Colliders and other Particle and Nuclear Physics Accelerators (Invited)

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