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Comprehensive studies of linear accelerators for muons in the medium velocity range

Tuesday 3 June 2025 16:00 (2 hours)

The muon linac has been developed at J-PARC to accelerate muons from thermal energy (25 meV) to 212 MeV using electrostatic extraction and four different types of radio-frequency cavities: RFQ, IH-DTL, DAW-CCL, and disk-loaded structures.

Although some of the technologies employed were relatively novel, most proof-of-principle demonstrations have been successfully completed through prototype testing and actual production.

Based on these experiences, it has become possible to propose a shorter or more efficient schematic design derived from the current design.

In this poster, the new schematic design will be presented.

Footnotes

Paper preparation format

LaTeX

Region represented

Asia

Funding Agency

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