

Muon Ionization Cooling Experiment Step IV
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In the Muon Ionization Cooling Experiment (MICE) the transverse emittance of the muon beam is reduced (muon cooling) by passing it through low-Z material, then through RF cavities to compensate for the energy loss. Transverse emittance reduction of the muon beam will be demonstrated for the first time in MICE Step IV configuration using liquid Hydrogen absorbers as well as a variety of solid absorbers. Current status and efforts towards Step IV are summarized, including hardware fabrication and testing, Monte Carlo simulations, track reconstruction algorithms.

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