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Delivery of Low Momentum Muons for Muon EDM Studies at Fermilab

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Within the Standard Model the electric dipole moment (EDM) of the muon is heavily suppressed. Observation of a non-zero EDM value would be an additional source of CP violation that would aid in answering the many open questions about the universe and the Standard Model. As part of an investigation into the feasibility of measuring the muon EDM at the $g-2$ storage ring at Fermilab, a study on the delivery of low momentum muons to the $g-2$ ring using the existing accelerator infrastructure is presented.

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Footnotes

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