

## Beam dynamics corrections to measurements of the muon anomalous magnetic moment

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The Muon  $g-2$  experiment at Fermilab is making progress towards its physics goal of measuring the muon anomalous magnetic moment with the unprecedented precision of 140 parts per billion. In April 2021 the collaboration published the first measurement, based on the first year of data taking. The second result is based on the second and third years of data taking combined. In this talk, we discuss the corrections to the anomalous spin precession signal due to beam dynamics effects being used to determine the anomalous spin precession frequency for the second result.

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