

The Muon g-2 Experiment at Fermilab

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The Muon g-2 experiment at Fermilab will build upon the work of its predecessors at CERN and Brookhaven to measure the anomalous magnetic moment of the muon, a_μ , to 0.14 ppm. With this factor of four improvement in precision over the statistically-limited Brookhaven E821 experiment, we will test the 3.6σ discrepancy between the Standard Model (SM) theory prediction and experimental results. The SM prediction and potential Beyond SM contributions will be briefly summarized. The experimental upgrades will be discussed, including the outcome of the storage ring's cross-country transport from Brookhaven to Fermilab this summer .

Primary author: Prof. GIBBONS, Lawrence (Cornell University)

Presenter: Prof. GIBBONS, Lawrence (Cornell University)

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