

The first results from the new $g-2$ experiment at Fermilab

Wednesday, 12 May 2021 11:00 (1 hour)

The muon $g-2$ experiment at Fermilab aims to measure the anomalous magnetic moment of the muon to the unprecedented precision of 140ppb. The current world's best measurement made at Brookhaven National Laboratory, with a precision of 540ppb, is at odds with the Standard Model theoretical prediction by 3.7 standard deviations. The new experiment is designed to discover whether this two decade old difference really is a sign of new physics. This talk will discuss how this offers a unique probe into beyond the standard model physics through the high precision that can be reached both in the theoretical prediction and experimental measurement. Data taking started in 2018 and here we will present the first, highly anticipated result from the first run, with a precision slightly better than the current world's best measurement.

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Meeting ID: 986 3026 4970

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