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### **The New g-2 Experiment at Fermilab**

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The New Muon g-2 experiment E989 at Fermilab will measure the muon's anomalous magnetic moment,  $a_\mu$ , with a precision goal of 140 ppb; a fourfold improvement over former measurements. Together with the J-PARC g-2 experiment aiming at a similar precision, these two experiments will shed light on the long-standing 3.5 standard deviation between the Brookhaven E821 experiment and the Standard Model calculation of g-2 for the muon. Future progress on the theoretical calculations will further increase the potential to discover new physics beyond the Standard Model. In order to achieve the overall precision, the new Fermilab experiment currently under construction will incorporate some key upgrades compared to the former setup at Brookhaven. In this presentation, these key improvements and the current status of the experiment will be reviewed.

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