

# PHYSICS AND ASTRONOMY COLLOQUIUM

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“The muon anomalous magnetic moment and the hunt for new physics”

## Abstract

“I will start with a brief history of the muon and its magnetic moment and then give an overview of the ongoing experiment at Fermilab (E989) and its first results. Next I’ll turn to the Standard Model calculation of the same, including the hadronic contributions which contribute the largest uncertainty. I will end with a brief discussion of possible new physics scenarios which might explain the roughly four standard deviation discrepancy between experiment and theory that has persisted for almost twenty years since the BNL (E821) measurement.”

Wednesday April 14, 2021  
3:30 pm. PDT