

Abstract Submitted
for the APR12 Meeting of
The American Physical Society

R&D for the Tracking Detector for the Muon g-2 Experiment at Fermi National Accelerator Laboratory LAURA NAPIERKOWSKI, Illinois Math and Science Academy, MANDY ROMINSKY, Fermilab, G-2 COLLABORATION — Fermilab's new muon g-2 experiment is designed to make high-precision measurements of the magnetic moment of the muon in order to test the validity of the Standard Model. It is currently undergoing detector research and development. The tracking detector is made of straw chambers, which consists of a small tube filled with gas and a thin wire running down the center. As the particles we detect move through the gas, they ionize and the current is collected on the wire. We are focusing on testing materials to be used for the straw tube as well as preparing vacuum chambers for testing the prototype.

Mandy Rominsky
Fermilab

Date submitted: 10 Jan 2012

Electronic form version 1.4