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**Analyzing Prototype Solid State Detector Performance and Suitability for the Deep Underground Neutrino Experiment**[1] AARON MUTCHLER, University of Colorado Boulder — The Deep Underground Neutrino Experiment (DUNE) is a new cutting edge experiment that will be fundamental in the study of neutrino oscillations and physics beyond the standard model. It will feature a high intensity beam that will utilize horn-focused mesons to produce a neutrino and muon beam, with the muons stopping in the material after the beamline. In order for DUNE to accurately study neutrino oscillations, the neutrino beam intensity, alignment, and distribution must be monitored in real time. Because muons follow the same trajectory as the neutrinos and are easier to detect, we use muon detectors to monitor the beam. We are investigating the durability and suitability of solid state muon monitors with two prototype detectors: a silicon detector and poly-crystal diamond detector. This poster will show results from these prototypes after several months of operation in a neutrino beam.

[1]United States Department of Energy

Aaron Mutchler
University of Colorado Boulder

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