

Physics Division Seminar

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**Mu2e at Fermilab: A Search for Muon
to Electron Conversion**

Host: Paul Reimer

Monday, November 20, 2017 – 203, R150, 3:30 PM

The Mu2e Experiment will search for the neutrinoless conversion of muons into electrons in the field of a nucleus. This reaction is an example of charged lepton flavor violation (CLFV), and its observation would be a sign of new physics; thus far no experiment has observed CLFV in this or any other reaction. Mu2e will be 10000 times more sensitive than previous searches, potentially probing for new physics at scales well beyond direct collider searches. We will describe the motivation for Mu2e, the proposed experimental approach, and the current status of the experiment.