THE MU2E EXPERIMENT AT FNAL

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The Mu2e Experiment at Fermilab is a search for charged lepton-number violation in the coherent, neutrinoless conversion of stopped muons into electrons in the field of a nucleus. It has an improved sensitivity over previous charged lepton-number violating experiments by a factor of some 10^{4}. Such experiments probe new physics at a scale inaccessible with direct searches at either present or planned high energy colliders. Thus Mu2e extends and complements the search for muon decay to electron+gamma (MEG) and other new physics searches at the LHC. The physics motivation for Mu2e, the novel design of the muon beamline and detector, and the current status of the experiment will be presented.