

NuFact 2026 - The 27th International Workshop on Neutrinos from Accelerators



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Status of the Mu2e experiment

Mu2e will search for coherent, neutrinoless muon-to-electron conversion in aluminum, $\mu^- + {}^{27}\text{Al} \rightarrow e^- + {}^{27}\text{Al}$, a charged-lepton-flavor-violating process whose observation would be unambiguous evidence for physics beyond the Standard Model. The signal is a monoenergetic electron near 104.97 MeV, close to the endpoint of the muon decay-in-orbit spectrum. Mu2e aims to reach a single-event sensitivity of approximately 3×10^{-17} , improving on previous conversion searches by four orders of magnitude. This talk will summarize the experimental concept, current detector and DAQ integration status, preparations for Mu2e's first physics data and future extensions to Mu2e.

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