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The Mu2e experiment

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Mu2e will search for coherent, neutrinoless conversion of muons into electrons in the nucleus field of aluminum with a sensitivity improvement of a factor of 10,000 over existing limits. Probing the charged lepton flavor-violating reaction at such sensitivity may uncover new physics at a scale unreachable by direct searches at current or planned high-energy colliders. The experiment complements and extends the current studies at MEG-II and the LHC. I will present the physics motivation for Mu2e, as well as the design and construction status of the experiment.

Working Group

WG 4: Muon Physics

Primary authors: GAPONENKO, Andrei (Fermilab); ON BEHALF OF THE MU2E COLLABORATION

Presenter: GAPONENKO, Andrei (Fermilab)

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