

# NuFact 2024 - The 25th International Workshop on Neutrinos from Accelerators

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## The Mu2e experiment

*Thursday, 19 September 2024 16:15 (20 minutes)*

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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