

# Inaugural US Muon Collider Meeting

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## **Towards a Muon Collider: High-Powered Targetry in a High-Field Solenoid for Mu2e-II and AMF**

Charged lepton flavor violation (CLFV) is expected in a diverse set of BSM scenarios. The proposed Mu2e-II and Advanced Muon Facility (AMF) experiments at Fermilab will make strong sensitivity improvements in the muon to electron conversion CLFV channel. There are a number of interesting synergies between R&D efforts for Mu2e-II/AMF and R&D needed for a US muon collider. One critical overlap is the need for high-powered targetry in a high-field solenoid. I will describe the targetry and magnetic field requirements of Mu2e-II and AMF and compare them to the requirements of the muon collider to highlight the possibility of using Mu2e-II and AMF as stepping stones on the path to a muon collider. The discussion will conclude with details of ongoing R&D efforts for Mu2e-II and AMF.

**Primary author:** KAMPA, Cole (Northwestern University)

**Presenter:** KAMPA, Cole (Northwestern University)

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