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Charged Particle Multiplicity Analysis in MicroBooNE¹ ALEENA RAFIQUE, Kansas State University, MICROBOONE EXPERIMENT COLLAB-ORATION — MicroBooNE is a short baseline neutrino experiment that utilizes 89 ton active volume liquid argon Time Projection Chamber (TPC) situated on the Booster Neutrino Beamline at Fermilab. It is the first of three liquid argon TPC detectors planned for the Fermilab Short Baseline Neutrino program and will directly probe the source of the anomalous excess of electron-like events in MiniBooNE, while also measuring low-energy neutrino cross sections and providing important RD for future detectors. In this talk, a study of charged particle multiplicity using neutrino charged-current inclusive events is presented. This analysis can be used to test models of neutrino-argon scattering, and it may be particularly sensitive to nuclear final state interaction effects.

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