

Measurement of Single Electron Events in MicroBooNE

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MicroBooNE is a Liquid Argon Time Projection Chamber detector designed to address the excess of low energy electromagnetic events observed by the MiniBooNE experiment. Electron neutrinos can create a wide variety of topologies when interacting in liquid argon, and this analysis measures events both with $(1eNp0\pi)$ and without $(1e0p0\pi)$ visible protons. This poster presents the measurement of single electron events in the MicroBooNE detector, which includes events across the full range of neutrino energy. The single electron selection $(1e0p0\pi)$ is orthogonal to the $1eNp0\pi$ selection which makes it possible for events to migrate between the two channels in a joint fit, and constrain uncertainties associated with low energy protons such as those related to reconstruction, multiplicity and their kinematics.

Summary

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