

## MicroBooNE tests of the MiniBooNE Low Energy Excess

The MiniBooNE Low Energy Excess (LEE) is the observation of anomalous events, whose true origin could be attributed to either electrons or photons in the detector as MiniBooNE lacked the power to distinguish them. One of the primary goals of MicroBooNE is to address this issue of the underlying source of the LEE, using Liquid Argon Time Projection Chamber technology to enable electron/photon separation. Before answering such a question one must find a way to model the MiniBooNE LEE in MicroBooNE. The reconstructed excess that was observed is highly affected by both the detector response and the analysis selection itself and their effects must be removed before mapping it to MicroBooNE. In this poster we describe this unfolding process, and show the end results of the true unfolded distributions for two well motivated LEE hypothesis: a) electrons from an increased  $\nu_e$  charged current event rate and (b) photons due to neutral current Delta production with subsequent radiative decay.

### Authorship annotation

for the MicroBooNE collaboration

### Session and Location

Wednesday Session, Poster Wall #114 (Auditorium Gallery Left)

### Poster included in proceedings:

yes

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**Track Classification:** Poster (participating in poster prize competition)