Contribution ID: **104** Type: **Poster**

Updated NC Delta Radiative Single Photon LEE Analysis From MicroBooNE

Monday, 16 September 2024 16:05 (1 hour)

MicroBooNE is a liquid argon time projection chamber in the Booster Neutrino Beam at Fermilab. One of MicroBooNE's primary goals is to investigate the MiniBooNE low energy excess of events containing a single electromagnetic shower. The largest predicted source of single shower events is charged current electron neutrino interactions, but MicroBooNE has disfavored an excess of this topology in several analyses. The next largest prediction for single showers is neutral current (NC) Delta radiative decays, producing a high energy photon. In this poster, we discuss an expansion upon a previous search for these NC Delta radiative topologies in MicroBooNE, with additional selections and additional data, and in particular, additional sensitivity to a potential excess of events with one photon and zero protons.

Working Group

WG 2: Neutrino Scattering Physics

Primary author: HAGAMAN, Lee (University of Chicago)

Presenter: HAGAMAN, Lee (University of Chicago)

Session Classification: Poster session

Track Classification: WG2: Neutrino Scattering Physics