Abstract Submitted
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Single-Photon Low-Energy Excess Search at MicroBooNE WEI TANG, University of Tennessee — MicroBooNE is a 85-ton active volume Liquid Argon Time Projection Chamber (LArTPC) which has been collecting data from the Booster Neutrino Beam at Fermilab since 2015. LArTPCs are imaging detectors that present neutrino interactions with excellent spatial resolution and isthe technology choice for next generation of neutrino experiments. One of the main goals of MicroBooNE is to investigate the low energy excess (LEE) of electromagnetic-like events observed by the MiniBooNE experiment. One interpretation of the MiniBooNE LEE is that it could be due to photons from neutral current Δ (1232) decays ($\Delta(1232) \rightarrow N\gamma$) mis-identified as electrons. In this talk, I will give an overview of the analysis and present recent results from MicroBooNEs single-photon LEE Search.

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