

Abstract Submitted
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Study of Electromagnetic Interactions with the MicroBooNE Detector DAVID CARATELLI, Columbia University, MICROBOONE COLLABORATION — MicroBooNE is an experiment which employs the Liquid Argon Time Projection Chamber (LArTPC) detector technology to study neutrinos produced with the Fermilab Booster Neutrino Beam. As for any accelerator-based detector interested in studying neutrino oscillations, it is essential to be able to identify and reconstruct the kinematic properties of electrons and photons produced in $\mu\nu$ and ν_e interactions. We report current progress in reconstructing electron and photon electromagnetic (EM) showers using data from the MicroBooNE LArTPC. These studies cover EM showers in the tens to hundreds of MeV energy range; they lay the foundation for MicroBooNE's investigation of the excess of low-energy EM events reported by MiniBooNE, and are of interest to the wider LArTPC neutrino community.

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