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Measurement and Simulation of Cosmic Ray Background in LArTF for MicroBooNE KATHERINE WOODRUFF, New Mexico State University — In an effort to characterize the cosmic ray background in MicroBooNE, a 80-ton Liquid Argon Time Projection Chamber (LArTPC) being built at Fermilab, our research group at New Mexico State University (NMSU) has built a plastic-scintillator cosmic ray detector. The detector measures the cosmic ray rate and angular dependence at the Liquid Argon Test Facility (LArTF), where MicroBooNE will be located during its run beginning in 2014. The detector data is compared to a Cosmic-Ray Shower Generator (CRY) Monte Carlo simulation. A description of the detector and simulation setups and results will be presented, and implications of the measured rates on the MicroBooNE detector will be discussed.

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