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Measurements of Charged-Current Muon-Neutrino interactions on Argon at MicroBooNE

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The MicroBooNE experiment studies neutrino interactions with a Liquid Argon Time Projection Chamber (LArTPC) as part of the Short Baseline Neutrino program at Fermilab. The MicroBooNE detector, located on-axis in the Booster Neutrino Beam, has an active volume of 85 tonnes of Liquid Argon and a single 2.5 m wide drift. This talk will present the differential cross-section measurement for charge-current muon-neutrino-Ar interactions with an inclusive selection, the cross-section for charge-current neutral pion production, and recents results for charge-current interactions with protons in the final selection. The data from as much as 1.6E20 protons on target is compared with various theoretical models for neutrino interactions on Argon and the potential for tuning or discriminating models is discussed.

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