

Abstract Submitted
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Charged current single pion to quasi-elastic cross section ratio

STEVEN LINDEN, Yale University, MINIBOONE COLLABORATION — Charged current π^+ (CC π^+) interactions are important in many neutrino experiments, including those studying neutrino oscillations, but the cross section for this process is not well understood at low energies. We present a new measurement of the CC π^+ cross section as a ratio to the charged current quasi-elastic cross section for muon neutrinos on mineral oil in the MiniBooNE experiment. With more than 46,000 CC π^+ events collected in MiniBooNE, this measurement represents a dramatic improvement in statistics and precision over previous results at low energies.

Steven Linden
Yale University

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