

Abstract Submitted
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Measurement of Dirt Events with MiniBooNE¹ HAIJUN YANG,
University of Michigan, Ann Arbor — Dirt events from secondary particles (especially high energy gammas) produced from neutrino interactions in the matter surrounding the MiniBooNE detector has significant impact on the neutrino oscillation sensitivity. A direct measurement of dirt events is made by enriching the sample of dirt events using three variables (visible energy, distance from track center to tank wall along the backward track direction, angle between track direction and direction from tank center to track center). Based on 1-d, 2-d, 3-d histograms and using both χ^2 and maximum-log-likelihood fit techniques, the fitted dirt rate defined as fitted dirt events divided by expected dirt events is 0.99 ± 0.15 .

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