

Abstract Submitted
for the APR06 Meeting of
The American Physical Society

CCpi0 events at MiniBooNE LAURA JEANTY, Yale University, MINIBOONE COLLABORATION — Charged current neutral pion events are the fourth largest exclusive sample of neutrino interactions at MiniBooNE, constituting about 4% of total neutrino interactions. The study of this sample is interesting in several respects. First, at MiniBooNE energies ($\sim 1\text{GeV}$) the cross section is known with only modest precision. Second, there is no coherent cross-section in this channel, and therefore the low Q^2 behavior differs from that of the $\text{CC}\pi^+$ channel. Finally, if one wants to use $\text{CC}\pi^+$ events for ν_e appearance studies, $\text{CC}\pi^0$ events are a large background. The study of this data sample in MiniBooNE is complicated by the fact that a full kinematic reconstruction requires simultaneously reconstructing three Cherenkov rings. We will report on the recent progress in the reconstruction and study of these events.

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Date submitted: 13 Jan 2006

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