

Abstract Submitted  
for the APR06 Meeting of  
The American Physical Society

**Constraining intrinsic  $\nu_e$  events in the MiniBooNE beam<sup>1</sup>**

KENDALL MAHN, Columbia University, MINIBOONE COLLABORATION — MiniBooNE is a short baseline neutrino experiment at Fermilab looking for  $\nu_\mu \rightarrow \nu_e$  oscillations in the region of the LSND signal. The neutrino beam is 99% pure muon flavor neutrinos from pion and kaon decays, however, kaons in the beam also decay to produce electron neutrinos. These “intrinsic” electron neutrinos are an important background to the electron neutrino appearance search. This talk will present how MiniBooNE constrains the number of kaons in the beam, and the number of “intrinsic” electron neutrino events.

<sup>1</sup>MiniBooNE gratefully acknowledges the support from the Department of Energy and the National Science Foundation. The presenter was supported by NSF grant NSF PHY-98-13383.

Kendall Mahn  
Columbia University

Date submitted: 14 Jan 2006

Electronic form version 1.4