

MINOS

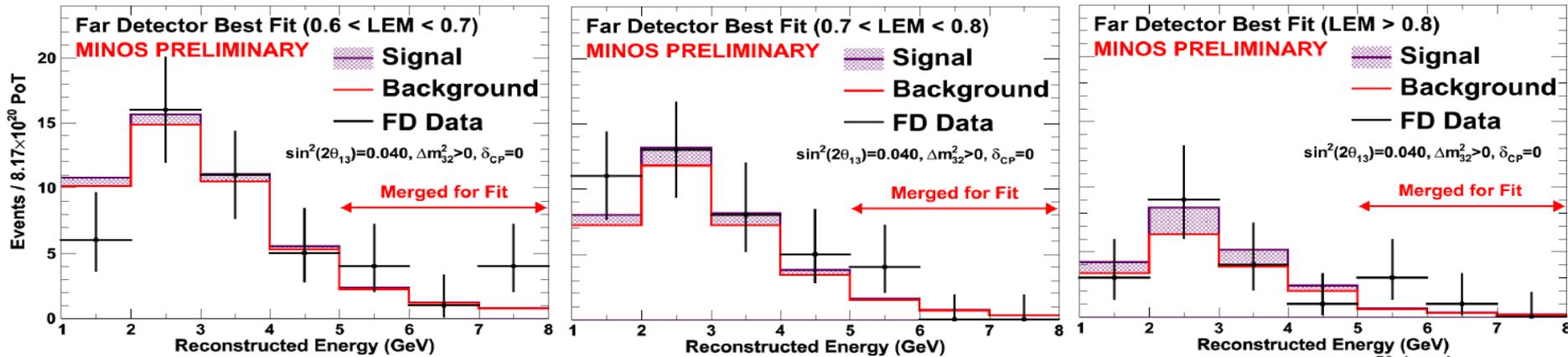
2011 Highlights



This presentation can be found at
http://www-numi.fnal.gov/pr_plots/index.html



Results on appearance of electron-neutrinos with 8.2×10^{20} POT

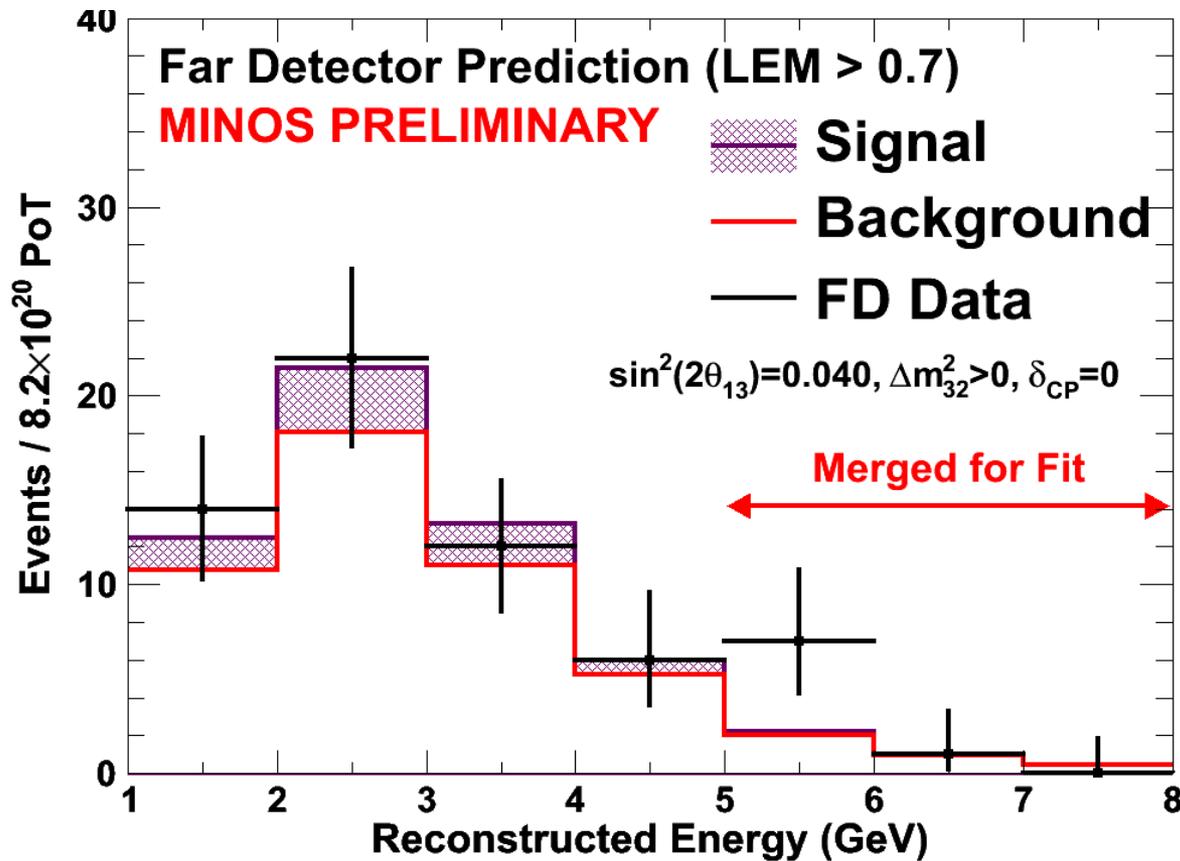


The reconstructed energy spectrum of the ν_e selected candidate events divided into three samples according to the LEM selection variable

A search for ν_e appearance is performed by fitting these 15 bins to various background+oscillation hypotheses.



Results on appearance of electron-neutrinos with 8.2×10^{20} POT



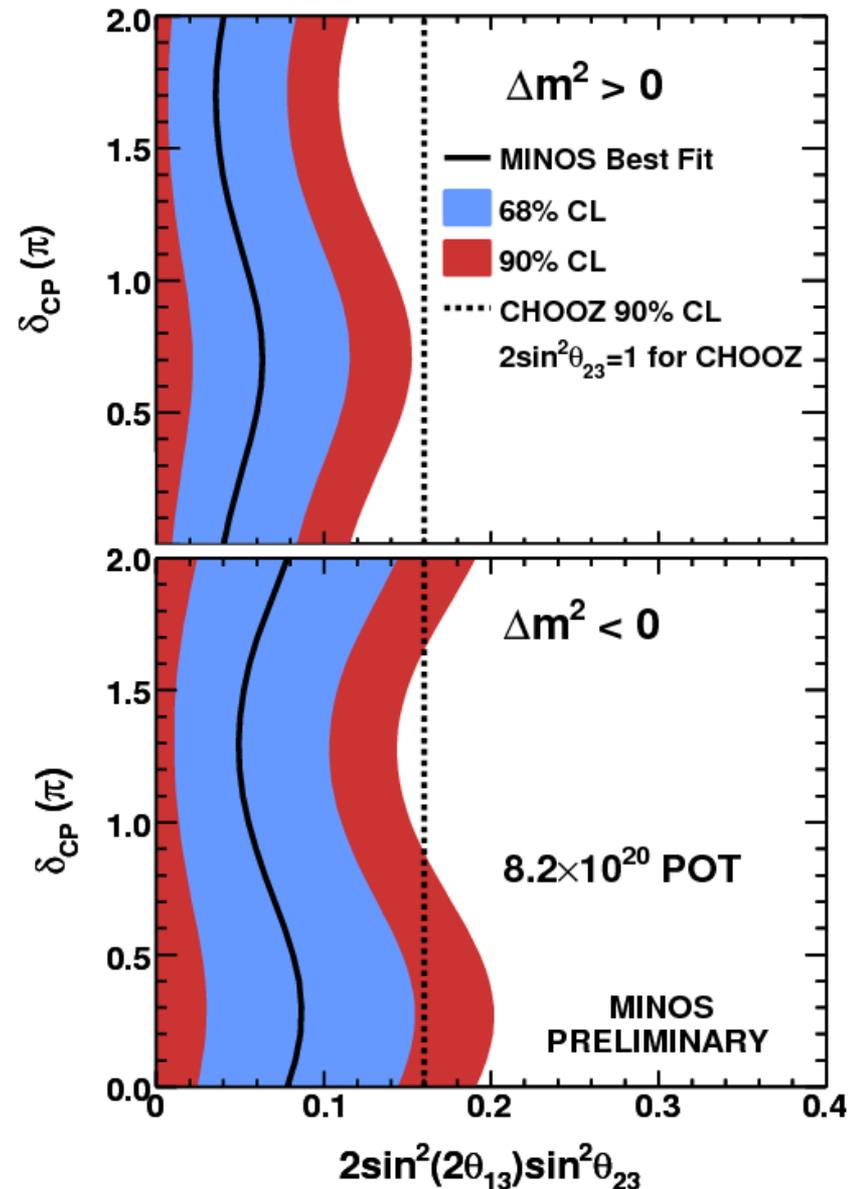
The reconstructed energy spectrum of ν_e -like candidate events
Note contours are produced using more information than this



Results on appearance of electron-neutrinos with 8.2×10^{20} POT

For $\delta_{\text{CP}} = 0$ the allowed values of $2\sin^2(2\theta_{13})\sin^2(\theta_{23})$ at 90% CL are:

0 to 0.12 (normal) central value: 0.04
0 to 0.19 (inverted) central value: 0.08



Exclusion limits based on the selected ν_e candidate event distribution.

Allowed values are in the colored regions



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For $LEM > 0.7$

Expected background events:
 49.5 ± 2.8 (syst) ± 7.0 (stat)

Observed events in FD data:
62

1.7 σ excess above background