MiniBooNE Report

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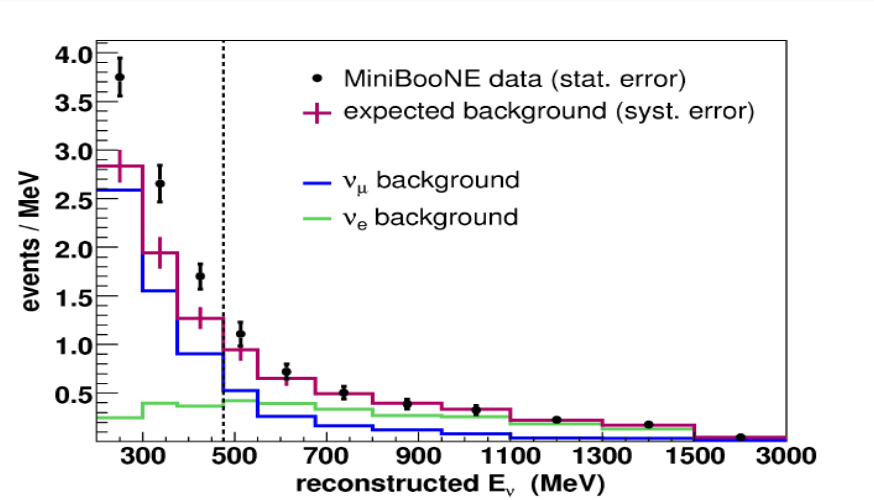
MiniBooNE 2007 Shutdown Summary

- Decommission Little Muon Counter (LMC).
- No Repairs to the detector.
  - Kept running in Supernova mode.
  - Staffing shifts Oct 8th.
- Switching horn power supplies to run in neutrino mode. Ready around Oct 15th.
- Will run concurrent with SciBooNE
  - Proposal to PAC to collect a further 3E20POT in anti-neutrino mode to improve sensitivity of anti-neutrino oscillation analysis.

Continue work on low Energy Excess: No Smoking Gun found so far!

Examination of backgrounds

Oscillation candidate summary table:

	reconstructed neutrino energy bin (MeV) 200-300	300-475	475-1250
total background	284±25	274±21	358±35
ν_e intrinsic	26	67	229
ν_μ induced	258	207	129
NC π^0	115	76	62
NC $\Delta \rightarrow N\gamma$	20	51	20
Dirt	99	50	17
other	24	30	30
data	375±19	369±19	380±19

- no significant excess at higher E, where ν_e bkgd dominant
- largest backgrounds at lower E, are ν_μ-induced, in particular:
  - NC π^0
  - NC $\Delta \rightarrow N\gamma$
  - Dirt
- currently scrutinizing these backgrounds