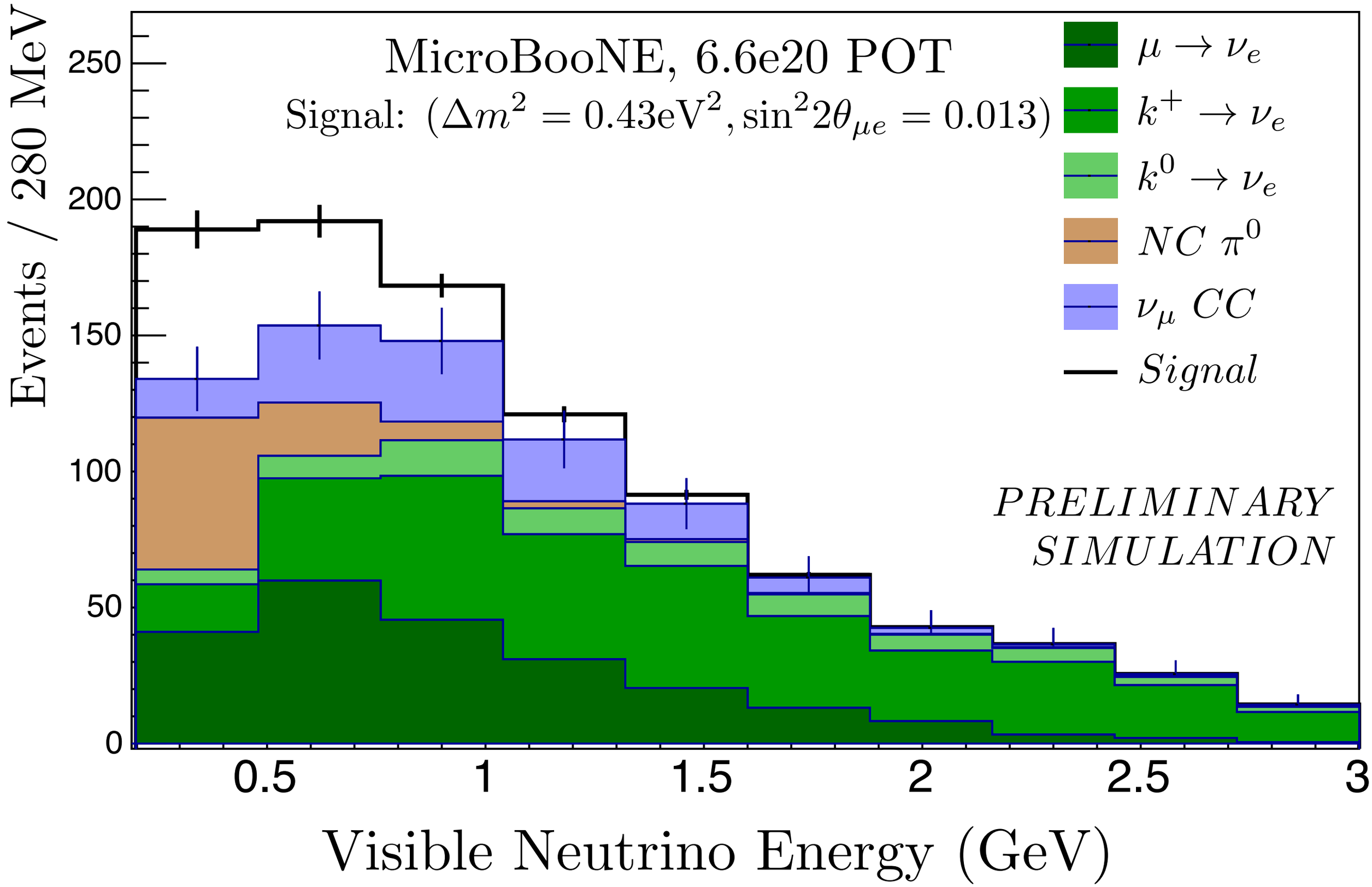
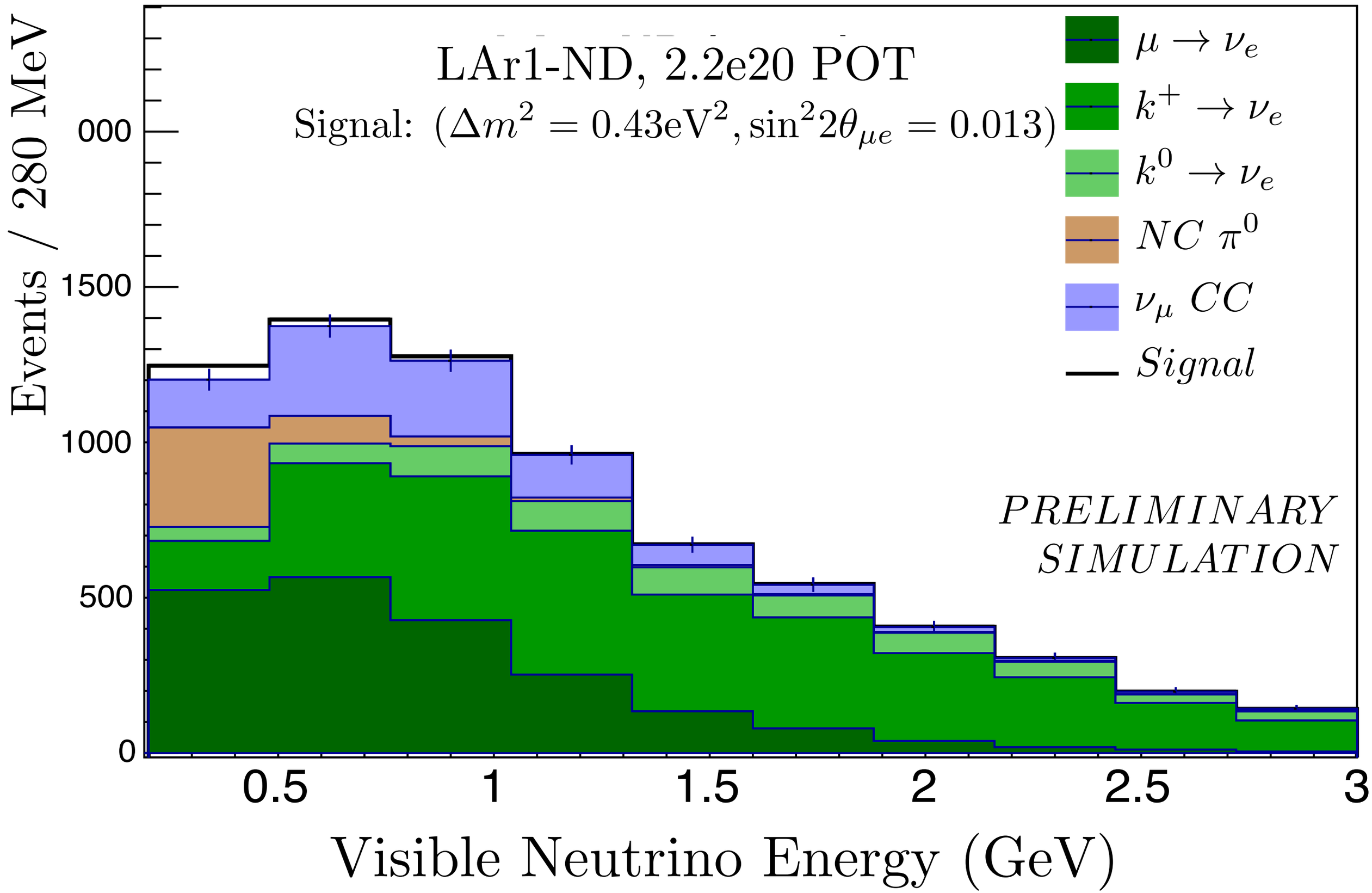
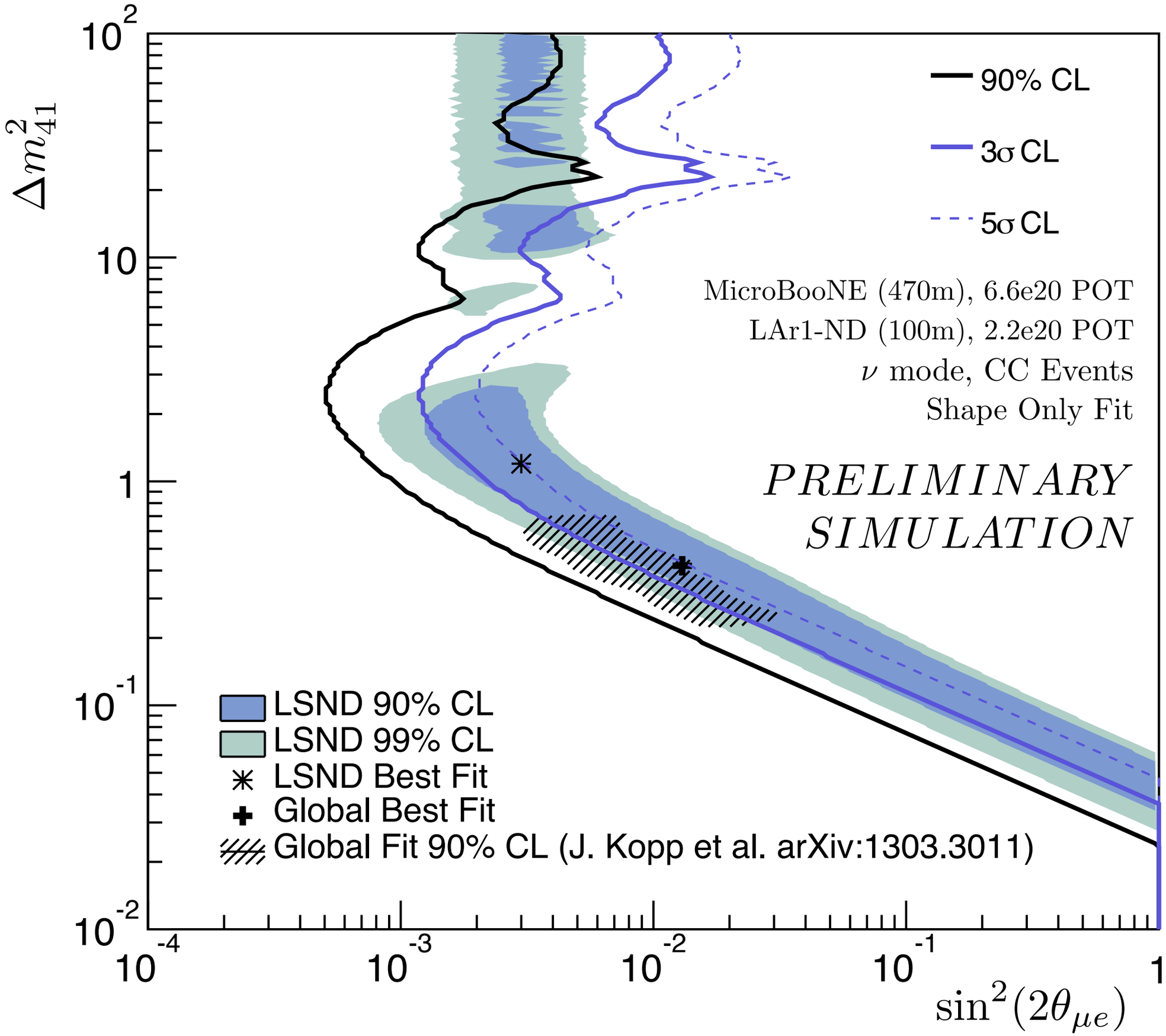

MicroBooNE, 6.6e20 POT
Signal: $(\Delta m^2 = 0.43\text{eV}^2, \sin^2 2\theta_{\mu e} = 0.013)$
$\mu \to \nu_e$
$k^+ \to \nu_e$
$k^0 \to \nu_e$
$NC\ \pi^0$
$\nu_\mu\ CC$
$Signal$
PRELIMINARY SIMULATION
Events / 280 MeV
0
50
100
150
200
250
0.5
1
1.5
2
2.5
3
Visible Neutrino Energy (GeV)


LAr1-ND, 2.2e20 POT
Signal: $(\Delta m^2 = 0.43\text{eV}^2, \sin^2 2\theta_{\mu e} = 0.013)$
$\mu \to \nu_e$
$k^+ \to \nu_e$
$k^0 \to \nu_e$
$NC\ \pi^0$
$\nu_\mu\ CC$
$Signal$
PRELIMINARY SIMULATION
Events / 280 MeV
000
1500
1000
500
0
0.5
1
1.5
2
2.5
3
Visible Neutrino Energy (GeV)


90% CL
3σ CL
5σ CL
MicroBooNE (470m), 6.6e20 POT
LAr1-ND (100m), 2.2e20 POT
ν mode, CC Events
Shape Only Fit
PRELIMINARY
SIMULATION
LSND 90% CL
LSND 99% CL
LSND Best Fit
Global Best Fit
Global Fit 90% CL (J. Kopp et al. arXiv:1303.3011)
Δm^2_{41}
$\sin^2(2\theta_{\mu e})$
10^2
10
1
10^{-1}
10^{-2}
10^{-4}
10^{-3}
10^{-2}
10^{-1}
1