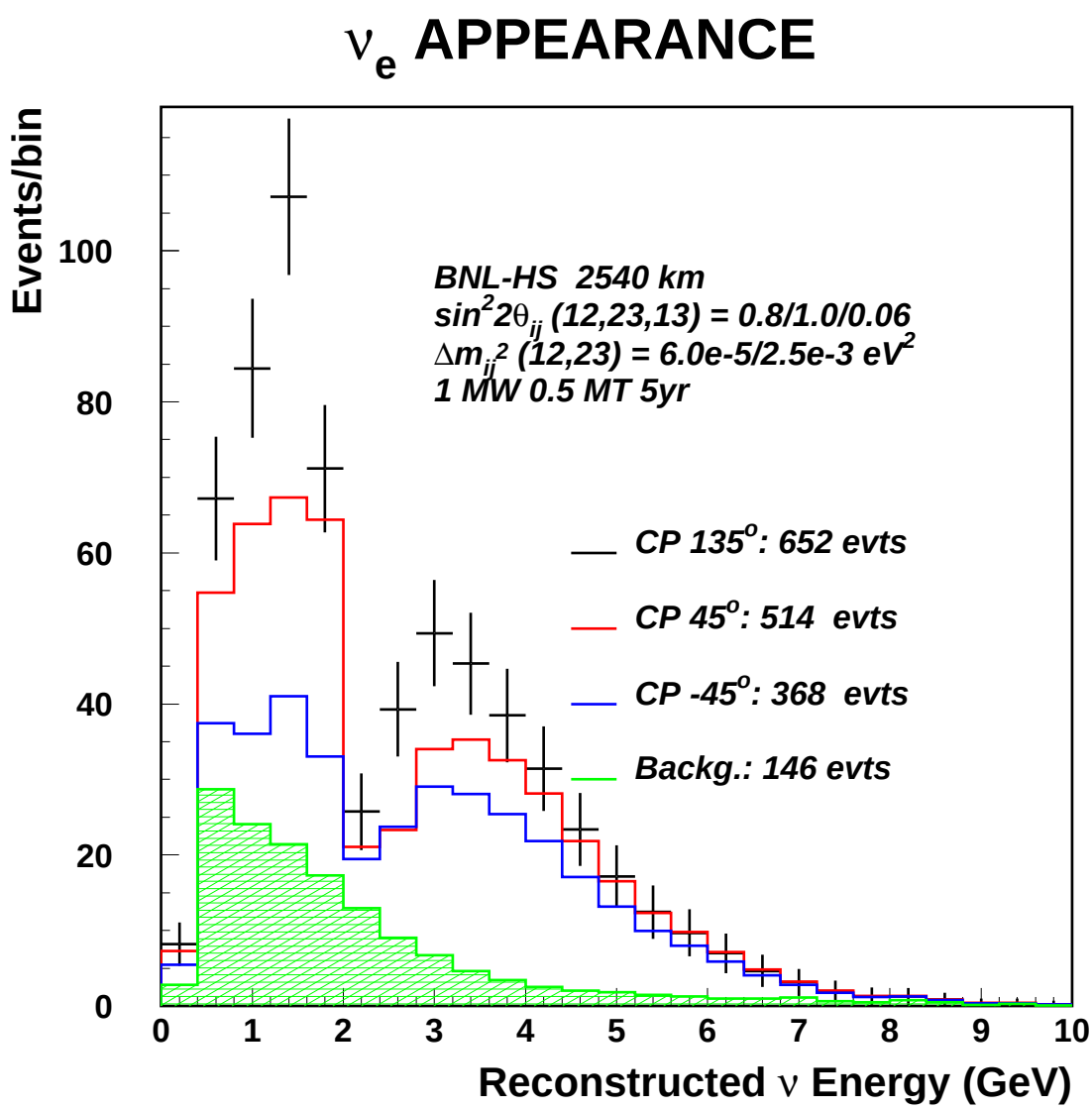
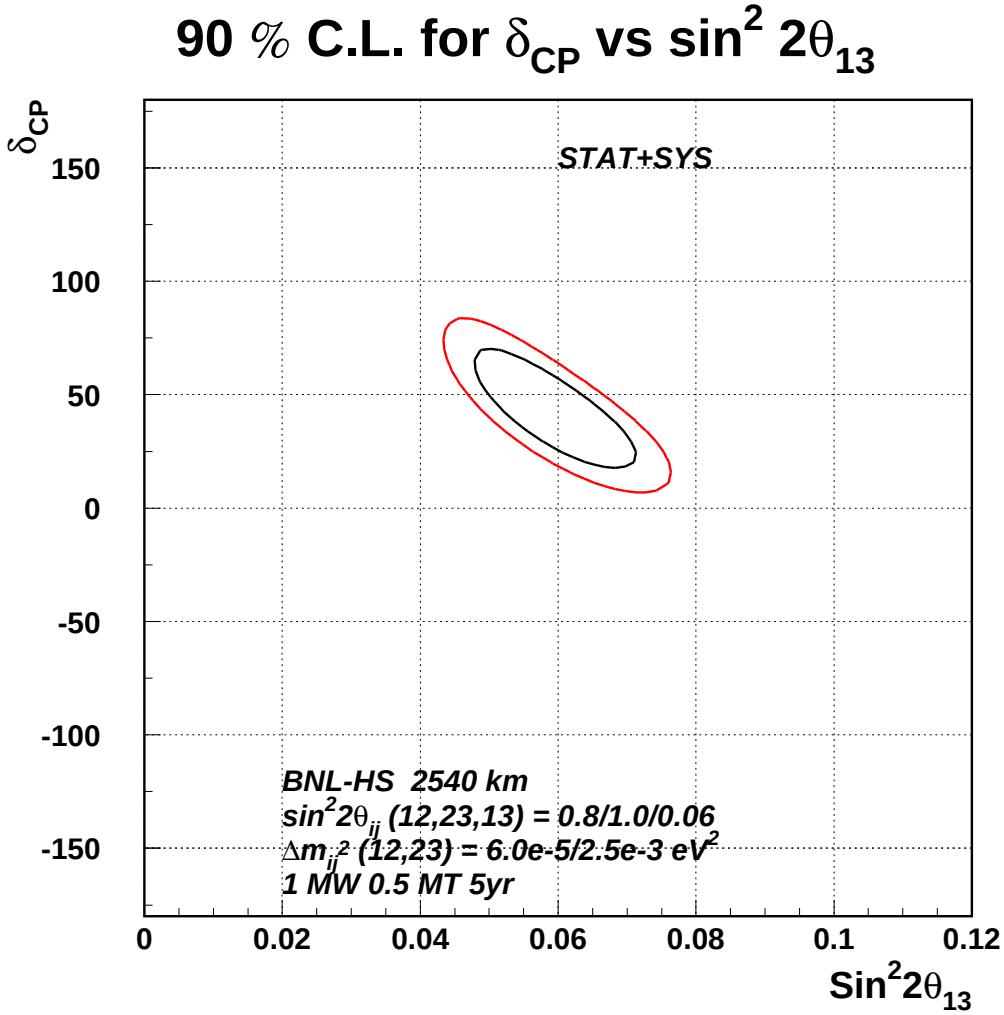
δ_{CP} Measurement. BNL-to-HS, 2540 km, 1 MW, 500kT, 5×10^7 sec



CP parameter can be determined from only neutrino data.

Good background subtraction can help.

Measurement of $\delta_{CP} = 45^o$
No anti-neutrino running.



Systematic error of 10% on backg.

$\Delta m^2_{21} = 6 \times 10^{-5} eV^2$, $\Delta m^2_{31} = 2.5 \times 10^{-3} eV^2$

$\sin^2 2\theta_{12} = 0.8$, $\sin^2 2\theta_{23} = 1.0$

$\delta_{CP} = 45^o$, $\sin^2 2\theta_{13} = 0.06$

68%, and 90% C.L.