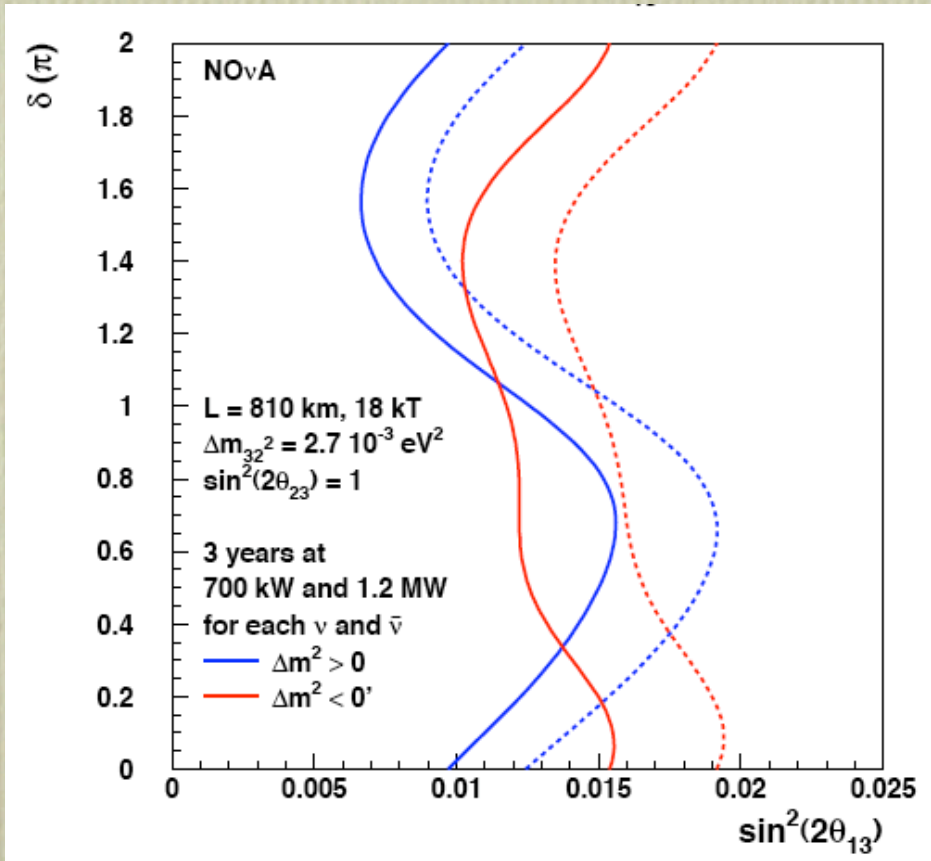
Fiducial and other stuff

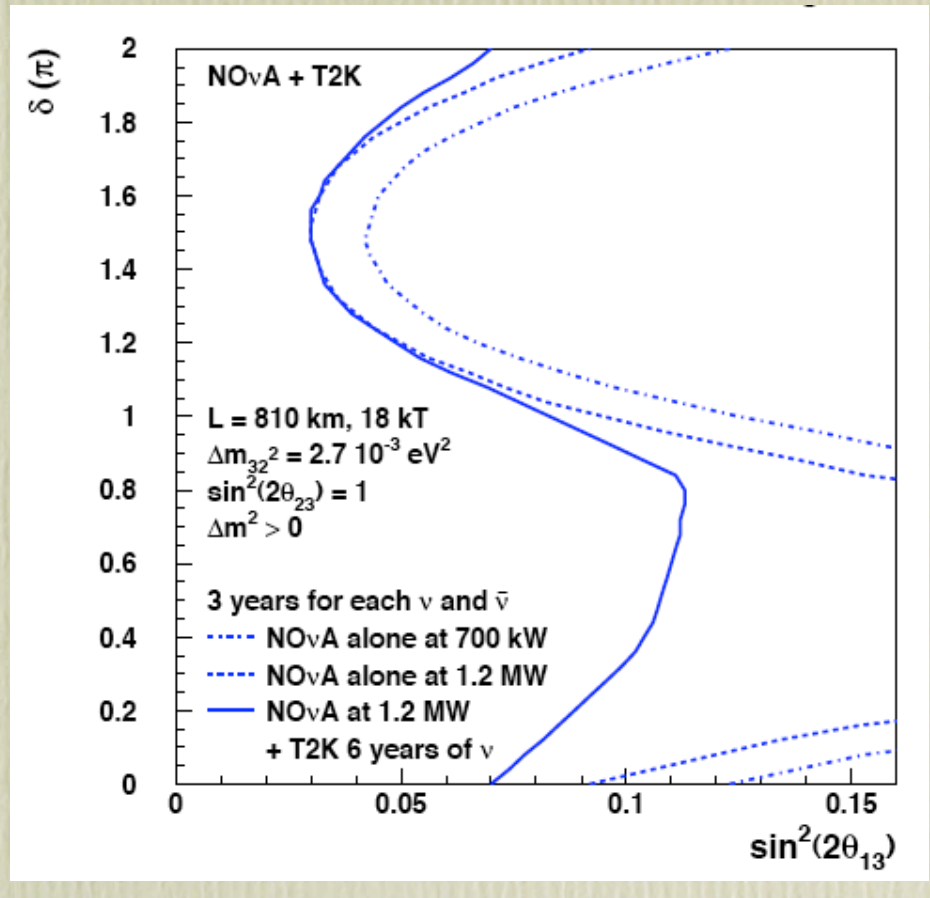
Milind Diwan SLAC P5 meeting

Fiducial volume

	SuperKamiokande	Homestake module
mined dia/hei	~40m/42m 52.75 kT	55m/~55m 130.60kT
Finished dia/hei	39m/42m 50.15kT	53m/53m 116.9kT
Veto vol.	33.8m/36.2m 32.46kT	52m/52m 110.4kT
Fiducial	29.8m/32.2m 22.4kT	49m/49m 92.3kT

NOvA Plots


NOνA
L = 810 km, 18 kT
$\Delta m_{32}^2 = 2.7\ 10^{-3}\ eV^2$
$\sin^2(2\theta_{23}) = 1$
3 years at
700 kW and 1.2 MW
for each ν and $\bar{\nu}$
$\Delta m^2 > 0$
$\Delta m^2 < 0$'
δ (π)
$\sin^2(2\theta_{13})$


NOνA + T2K
L = 810 km, 18 kT
$\Delta m_{32}^2 = 2.7\ 10^{-3}\ eV^2$
$\sin^2(2\theta_{23}) = 1$
$\Delta m^2 > 0$
3 years for each ν and $\bar{\nu}$
NOνA alone at 700 kW
NOνA alone at 1.2 MW
NOνA at 1.2 MW
+ T2K 6 years of ν
δ (π)
$\sin^2(2\theta_{13})$