

## T2K $\nu_e$ appearance contour file (ICHEP2012 results)

`t2k_ichep2012_ptheta_contour.root` contains following ROOT objects (TGraph):

- `g_dl_best_nh` :  
Best fit point of  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  assuming normal hierarchy (NH).
- `g_dl_68_ll_nh` :  
68 % C.L. lower limit point of  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  assuming NH.
- `g_dl_68_ul_nh` :  
68 % C.L. upper limit point of  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  assuming NH.
- `g_dl_90_ll_nh` :  
90 % C.L. lower limit point of  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  assuming NH.
- `g_dl_90_ul_nh` :  
90 % C.L. upper limit point of  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  assuming NH.
- `g_dl_best_nh` :  
Best fit point of  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  assuming inverted hierarchy (IH).
- `g_dl_68_ll_nh` :  
68 % C.L. lower limit point of  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  assuming IH.
- `g_dl_68_ul_nh` :  
68 % C.L. upper limit point of  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  assuming IH.
- `g_dl_90_ll_nh` :  
90 % C.L. lower limit point of  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  assuming IH.
- `g_dl_90_ul_nh` :  
90 % C.L. upper limit point of  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  assuming IH.

Figure 1 shows the best fit value and the allowed region 68 % (green) and 90 % C.L. (blue) for  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$  using this file.

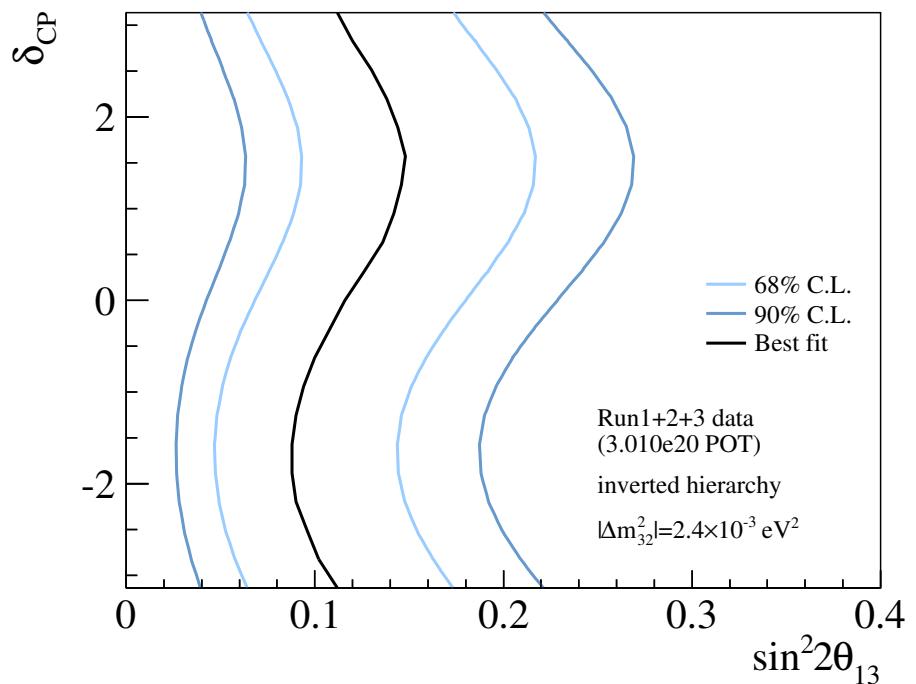
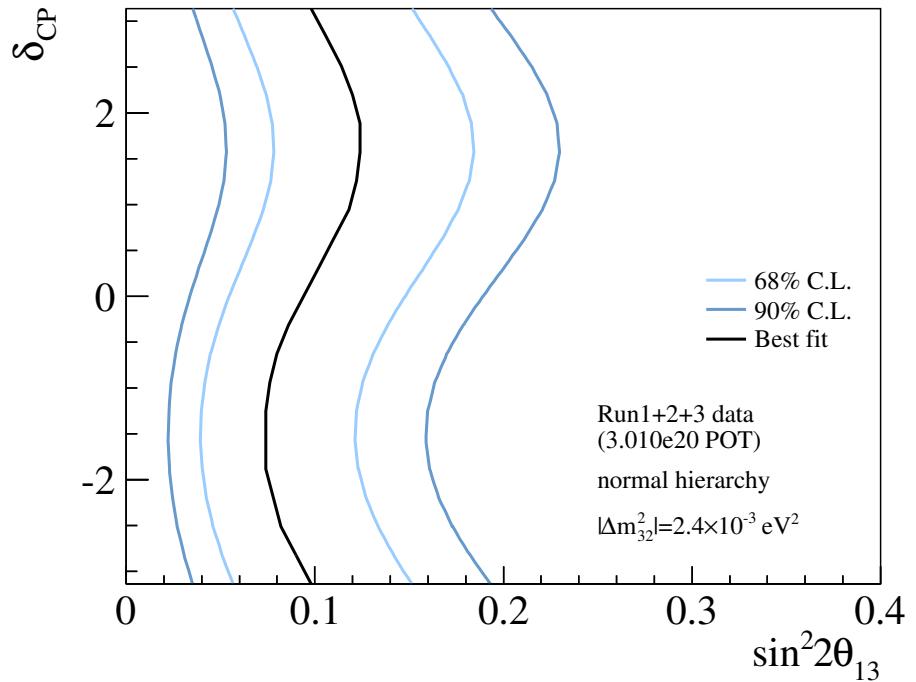


Figure 1: Allowed region of 68 % (green) and 90 % C.L. (blue) for  $\sin^2 2\theta_{13}$  for each value of  $\delta_{CP}$ . The black solid line is the best fit value for each value of  $\delta_{CP}$ . Top (bottom) plot: normal (inverted) hierarchy is assumed.