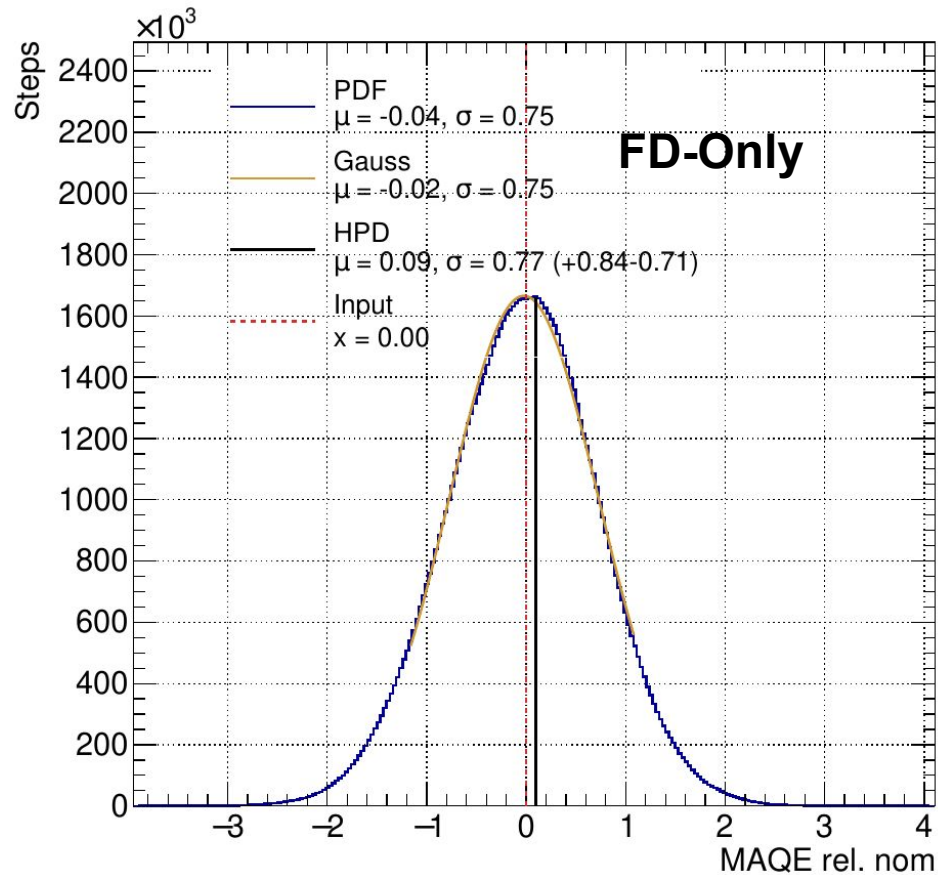


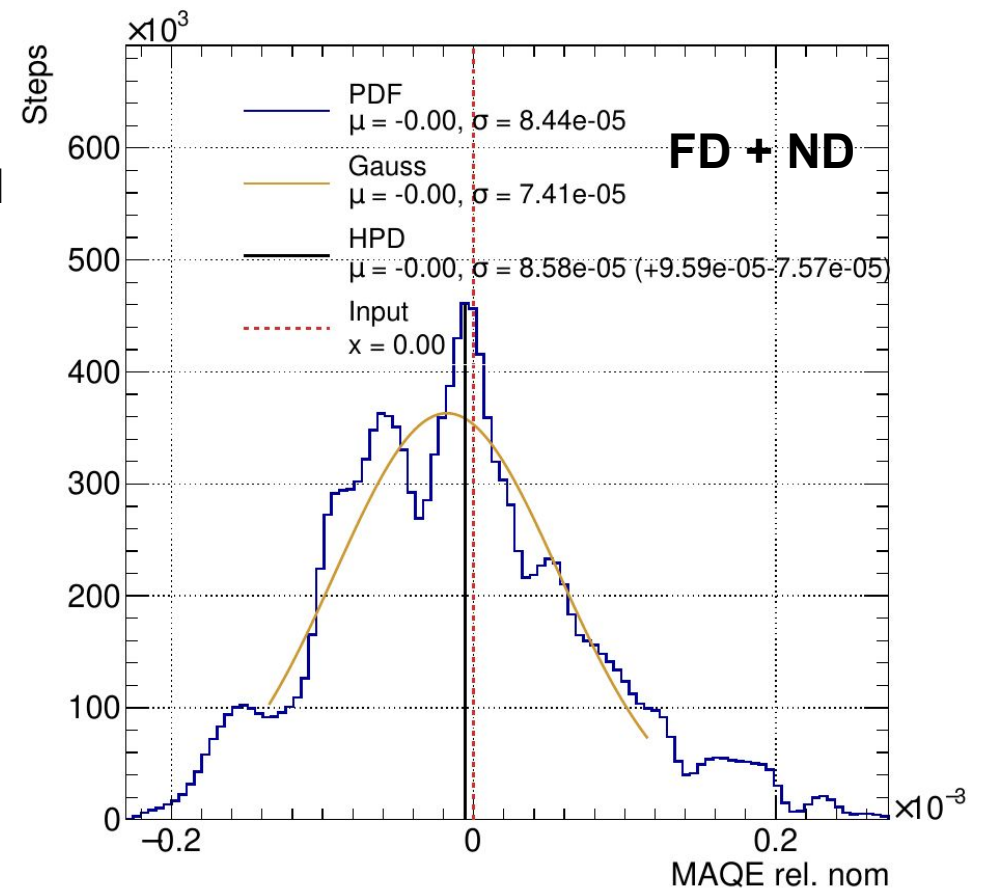
Results using ND Covariance Matrix

Liban Warsame for the MaCh3 Group

MaQE Posterior



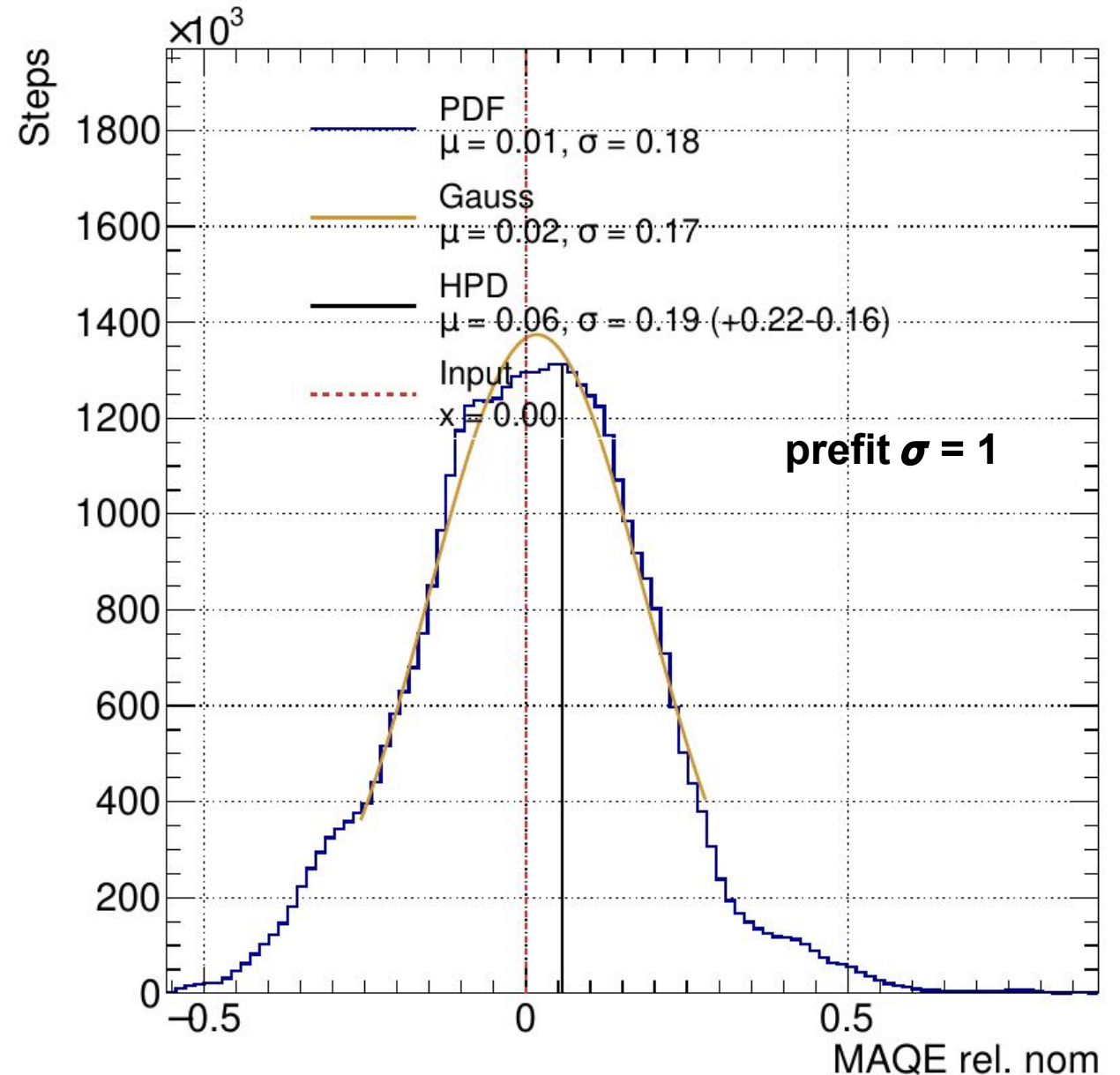
prefit $\sigma = 1$



- Posterior/Prior ~ 0.0001 upon addition of ND samples
- Irregular shape due to bad-mixing

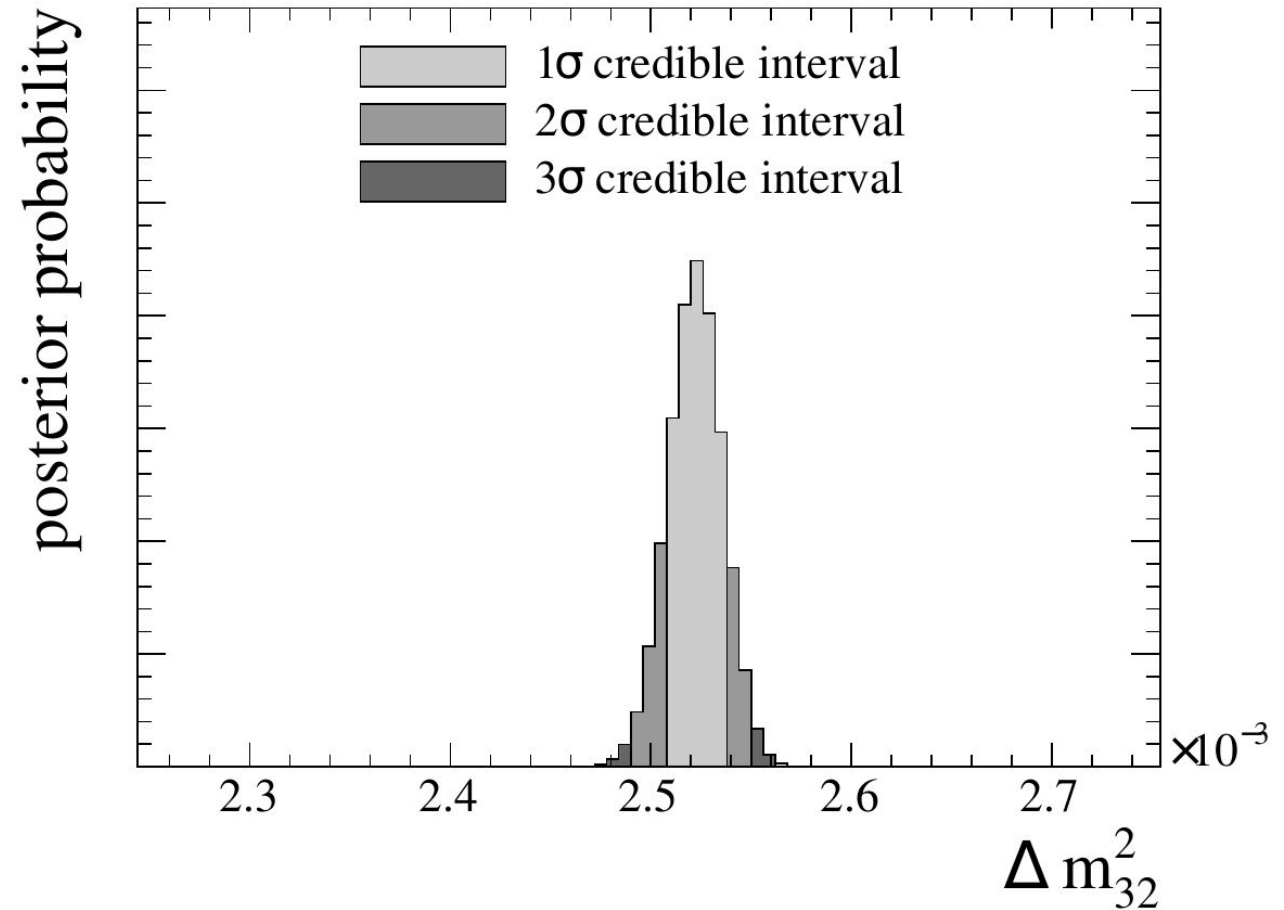
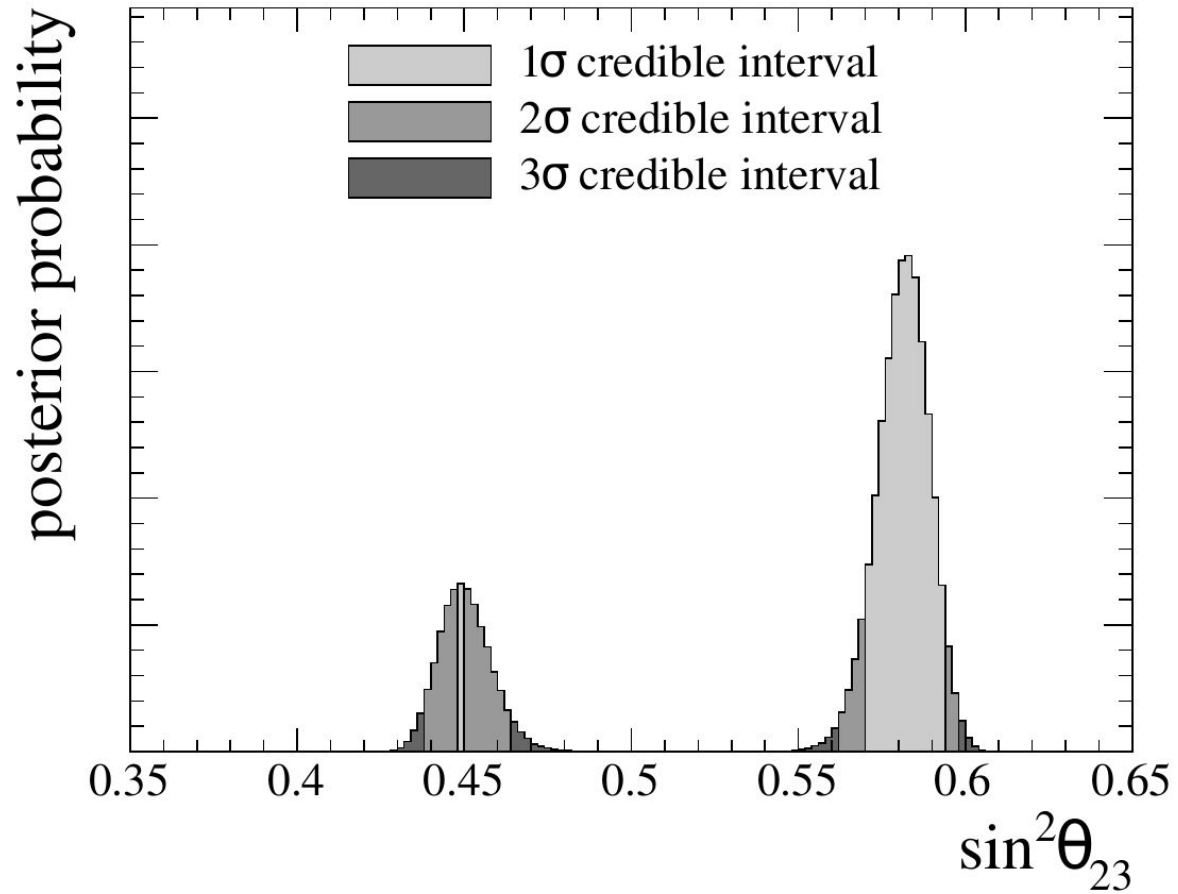
MaQE Posterior (New)

- Posteriors are much better
- ~ **20%** of the prefit uncertainty for MaQE
 - Roughly what the TDR saw?
- Better postfit uncertainties across all systematics

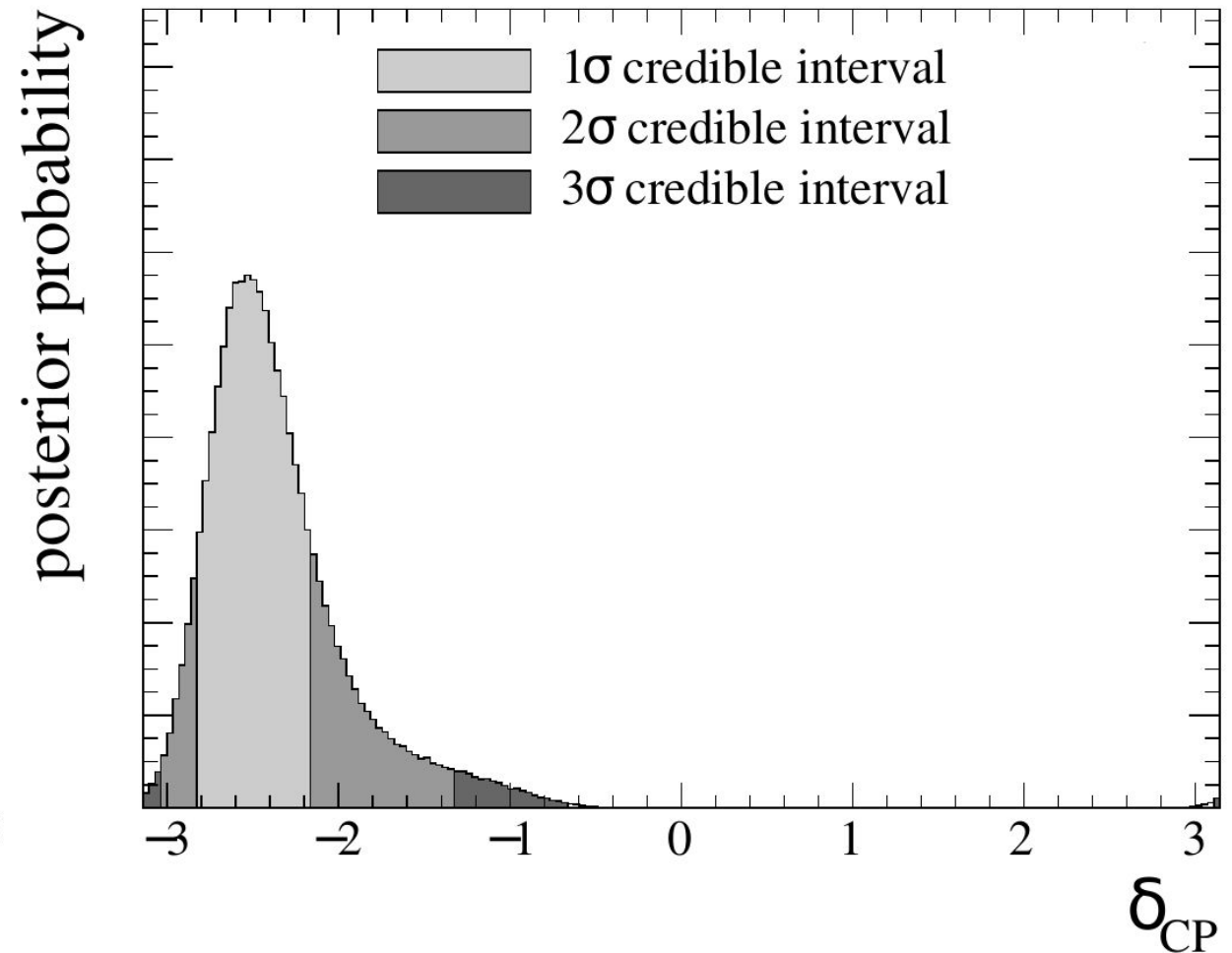
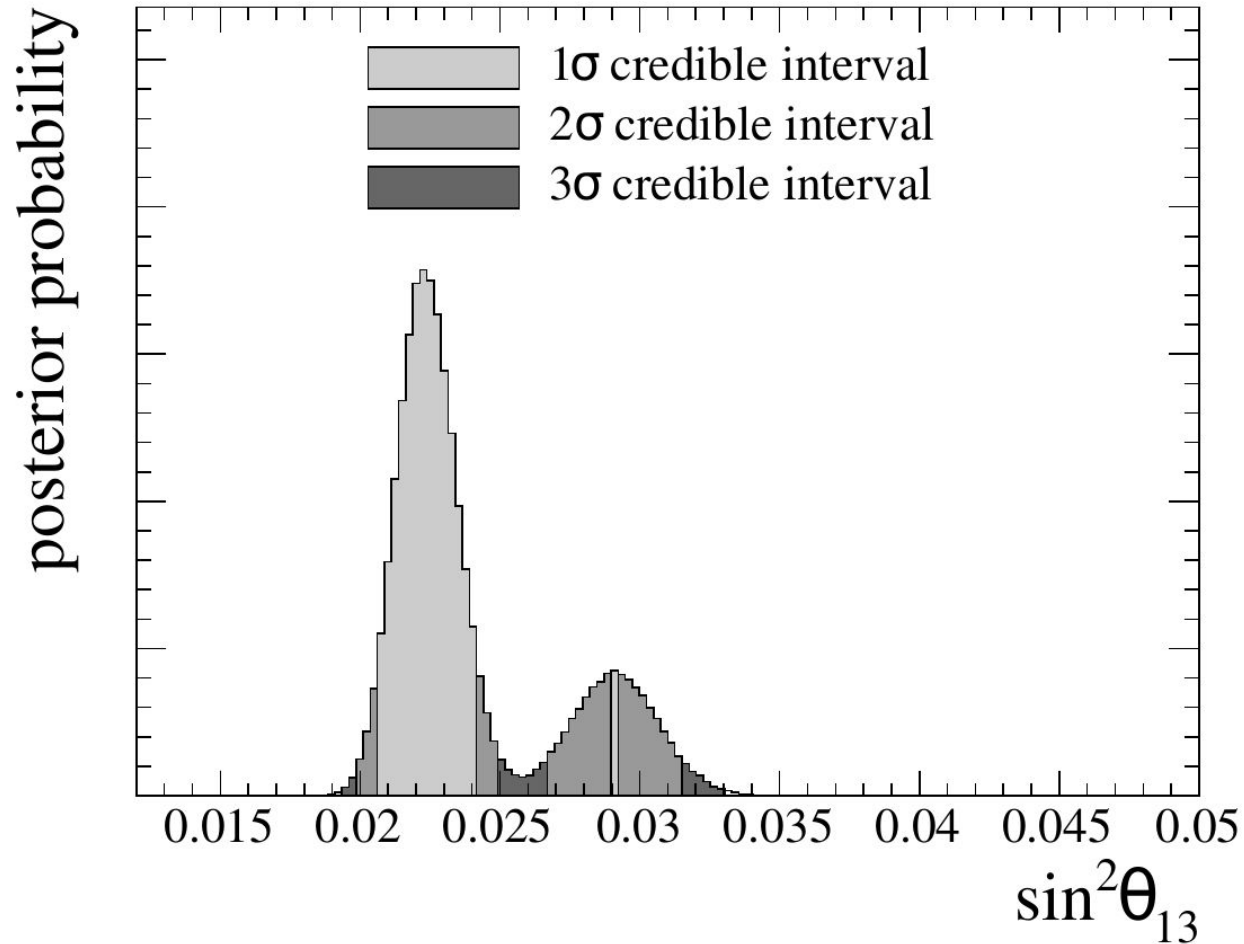


Plots for NuPhys 2023 (Still work in progress...)

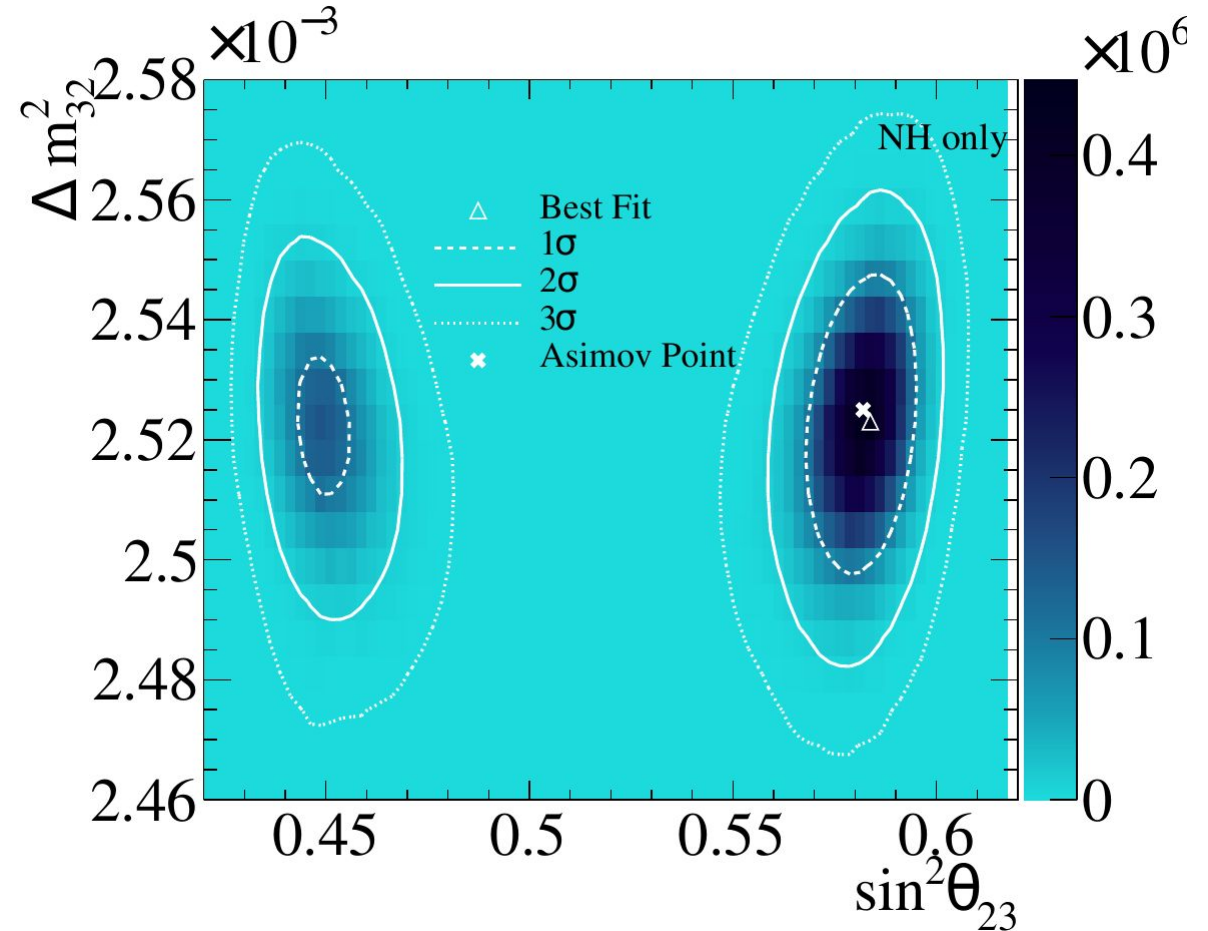
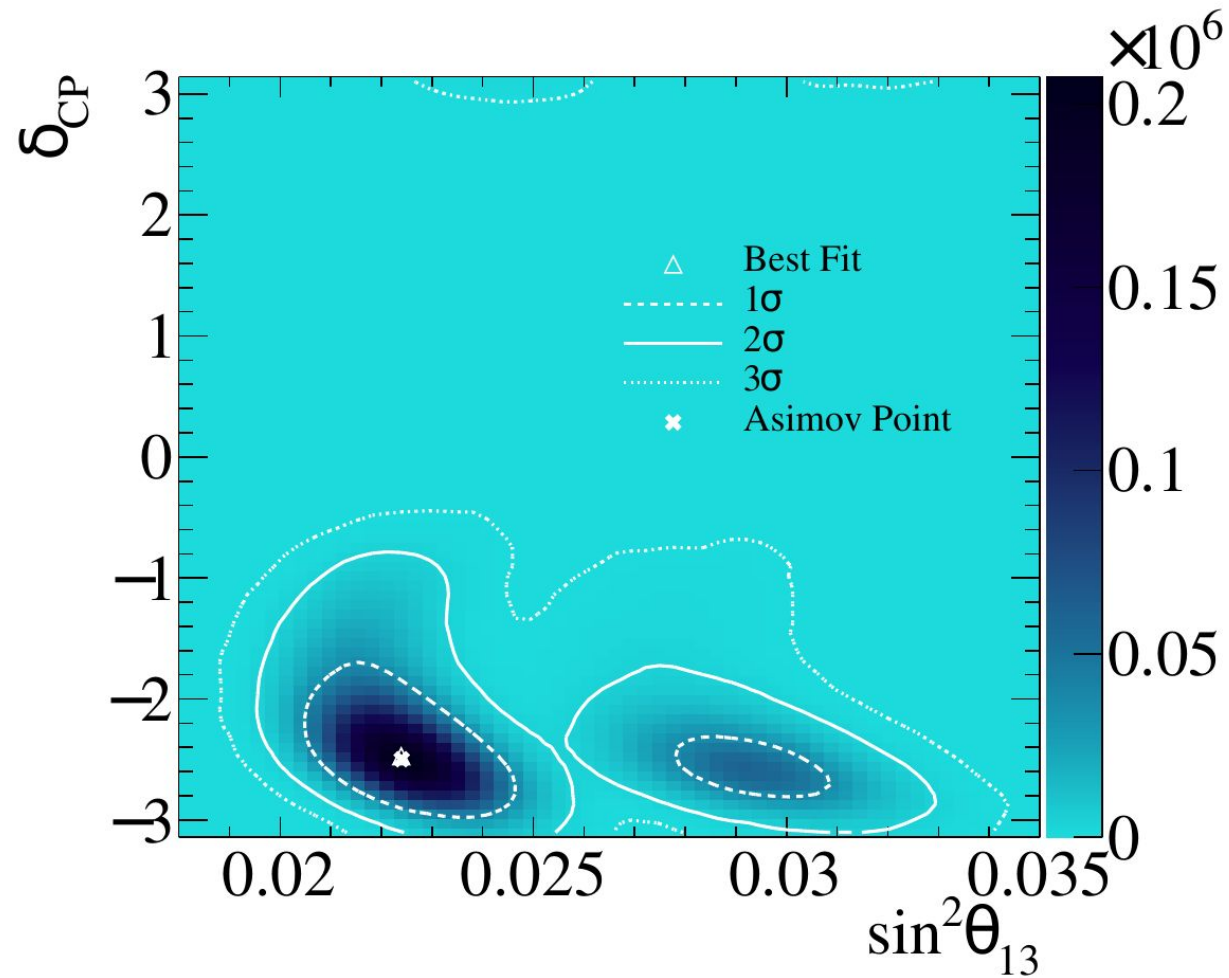
1D Posteriors



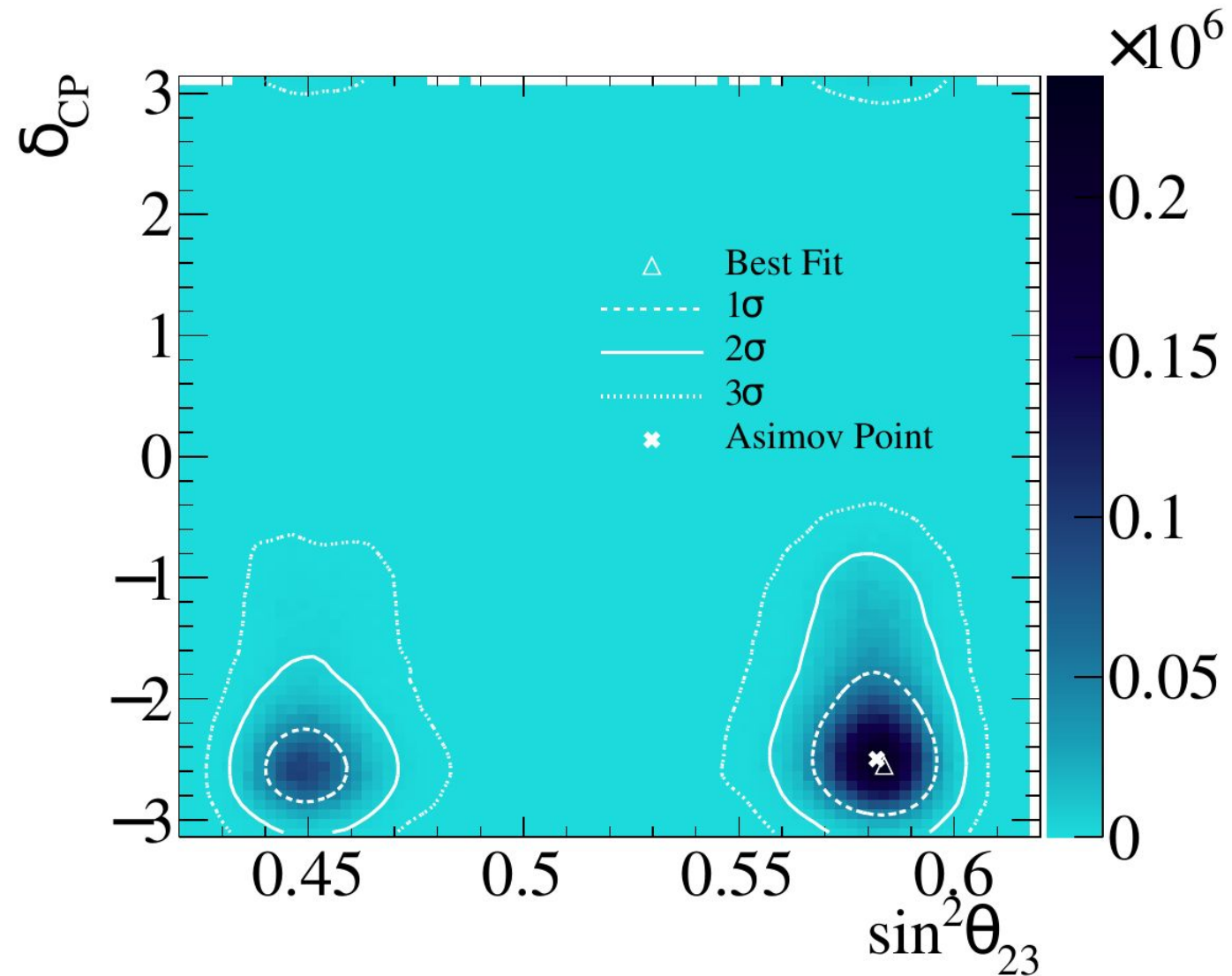
1D Posteriors



2D Posteriors



2D Posteriors



2D TDR Comparison

- Not going into to talk
- Simply proof that TDR and MACH3 fits make similar statements

