

Pre-fit impact on μ :

$\theta = \hat{\theta} + \Delta\theta$ $\theta = \hat{\theta} - \Delta\theta$

Post-fit impact on μ :

$\theta = \hat{\theta} + \Delta\hat{\theta}$ $\theta = \hat{\theta} - \Delta\hat{\theta}$

—●— Nuis. Param. Pull

γ (chanhhcattthpth200300windowsr bin 0)

theory ttbar parton shower tth

theory signal top FSR tth

JET PunchThrough MC16

NF hh ttH Ztt

theory signal top ISR tth

theory signal tth me

JET fJvtEfficiency

JET Pileup OffsetMu

JET EffectiveNP Statistical3

JET EffectiveNP Statistical4

NF hh ttH Top

JET SingleParticle HighPt

JET EffectiveNP Statistical5

theory z mur muf envelope tth

JET BJES Response

JET EffectiveNP Statistical6

γ (chanhhcattthttbarcr bin 12)

γ (chanhhcattthztcr bin 12)

JET JER DataVsMC_MC16

