

Pre-fit impact on $\mu(tHq)$:

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

$\Delta\mu(tHq)$
-6 -4 -2 0 2 4 6

Post-fit impact on $\mu(tHq)$:

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

— Nuis. Param. Pull

γ (SRBDTtHq2L1TAUOS bin 3)

$t\bar{t}$ FSR

$t\bar{t}$ NLO gen.

Tau fake norm.

JER EffectiveNP 1

γ (SRBDTtHq2L1TAUOS bin 0)

γ (SRBDTtHq2L1TAUOS bin 2)

Z+jets XS

JER DataVsMC MC16

JES flavour composition

JER EffectiveNP 3

$t\bar{b}$ XS

JER EffectiveNP 9

JER EffectiveNP 4

JES η intercalibration modelling

$t\bar{t}$ $\mu_R \mu_F$ scale

JES pileup ρ topology

$t\bar{t}$ PS + had.

$t\bar{t}$ hdamp=3m_{top}

JER EffectiveNP 5

$\sqrt{s} = 13 \text{ TeV}, 140 \text{ fb}^{-1}$

$(\hat{\theta} - \theta_0) / \Delta\theta$
-2 -1.5 -1 -0.5 0 0.5 1 1.5 2

