

 $\widehat{Y}_t = 1.16^{+0.24}_{-0.35}$ arXiv:2009.07123 **CMS** Supplementary Pileup 31 32 Jet energy AbsoluteScale prefire (2017) 33 NNPDF variation 1 (2016) 34 35 Jet energy Fragmentation 36 b fragmentation Jet energy PileupPtBB (2018) 37 Jet energy *PileupDataMC* (correlated) 38 Jet energy RelativeFSR (2016) 39 Muon reconstruction efficiency (2016) 40 lumi (2016) 41 Jet energy PileupDataMC (2016) 42 b tagging efficiency (2017) 43 b tagging miss-ID efficiency (2017) 44 Jet energy *RelativeBal* (correlated) 45 Jet energy PileupPtBB (2016) 46 b decay 47 Jet energy RelativePtEC1 (2017) 48 lumi (2018) 49 NNPDF variation 2 (correlated) 50 vv\_norm 51 b tagging miss-ID efficiency (2016) 52 53 Jet energy RelativeJEREC1 (2016) Electron reconstuction efficiency (2018) 54 55 Jet energy PileupDataMC (2018) Jet energy RelativeBal (2018) 56 57 rsfs Muon reconstruction efficiency (2017) 58 NNPDF variation 0 (2016) 59 lumi (2017) 60 -2 -0.010 0.01 → Pull +1σ Impact -1σ Impact



