b-tag Eigenvar. 33 RNN Tau ID 1P (20-25) tl hdamp=3mtop b-tag Eigenvar. 32 Tau reconstruction tt FSR b-tag Eigenvar. 31 Tau electron veto (syst.) tt ISR $t \hspace{-0.1cm} \begin{array}{c} \mu \hspace{-0.1cm} \mu \hspace{-0.1cm} \begin{array}{c} \mu \hspace{-0.1cm} \end{array} \hspace{-0.1cm} \text{scale} \\ t \hspace{-0.1cm} \begin{array}{c} \mu \hspace{-0.1cm} \end{array} \hspace{-0.1cm} \text{scale} \\ \end{array}$ b-tag Eigenvar. 30 Tau electron veto (stat.) b-tag Eigenvar. 29 $\mu_{_{F}}$ scale Tau electron veto (tot.) tl μ scale Tau energy scale (physicslist) b-tag Eigenvar. 28 b-tag Eigenvar. 27 Tau energy scale (model closure) tt PS + had b-tag Eigenvar. 26 Tau energy scale (insitu fit) t<mark>l</mark> NLO gen. Tau energy scale (insitu exp.) b-tag Eigenvar. 25 Z+jets $\mu_R \mu_F$ scale b-tag Eigenvar 24 Z+jets μ scale Tau energy scale (detector) b-tag Eigenvar. 23 Z+jets μ scale Muon TTVA eff. (stat) b-tag Eigenvar. 22 Muon trigger eff. (stat) b-tag Eigenvar. 21 Muon isol. eff. (stat) ttZ $\mu_{\text{R}}\mu_{\text{F}}$ scale Muon low pt ID eff. (stat) b-tag Eigenvar. 20 ttZ µ scale b-tag Eigenvar. 19 $ttZ \mu_R^r scale$ Muon ID eff. (stat) Muon TTVA eff. (syst) b-tag Eigenvar. 18 ttZ NLO gen. + PS + had. Muon trigger eff. (syst) b-tag Eigenvar. 17 ttW $\mu_{\text{R}}\mu_{\text{F}}$ scale b-tag Eigenvar. 16 Muon isol. eff. (syst) $ttW^{\mathsf{R}}\mu_{\mathsf{F}} \mathsf{scale}$ Muon low pT ID eff. (syst) b-tag Eigenvar. 15 Muon ID eff. (syst) b-tag Eigenvar. 14 ttW μ scale b-tag Eigenvar. 13 Muon energy scale ttW NLO gen. + PS + had. b-tag Eigenvar. 12 Muon sagitta ρ topology tW FSR b-tag Eigenvar. 11 Muon sagitta residual bias tW ISR $\begin{array}{c} \text{tW } \mu_{\text{R}}\mu_{\text{F}} \text{ scale} \\ \text{tW } \mu_{\text{F}} \text{ scale} \end{array}$ b-tag Eigenvar. 10 Muon energy resolution (MS) b-tag Eigenvar. 9 Muon energy resolution (ID) b-tag Eigenvar. 8 Electron trigger eff. tW μ scale b-tag Eigenvar. 7 Electron reco. eff. tW PS + had. Electron isol. eff. (syst) b-tag Eigenvar. 6 tW NLO gen. Electron isol. eff. (stat) b-tag Eigenvar. 5 tW (DR vs. DS) b-tag Eigenvar. 4 Electron ID eff. Diboson $\mu_B \mu_F$ scale b-tag Eigenvar. 3 Diboson μ_F scale Electron energy scale Electron energy scale AFII b-tag Eigenvar. 2 Diboson μ scale b-tag Eigenvar. 1 Electron energy resolution Diboson NLO gen. + PS + had. b-tag Eigenvar. 0 light-tag Eigenvar. 19 ttH FSR JES effective NP stat. 6 $\begin{array}{c} \text{ttH ISR} \\ \text{ttH } \mu_{\text{R}} \mu_{\text{F}} \text{ scale} \\ \text{ttH } \mu_{\text{F}} \text{ scale} \end{array}$ light-tag Eigenvar. 18 JES effective NP stat. 5 light-tag Eigenvar. 17 light-tag Eigenvar. 16 JES effective NP stat. 4 light-tag Eigenvar. 15 JES effective NP stat. 3 ttH μ scale light-tag Eigenvar. 14 JES effective NP stat. 2 tH PS + had. JES effective NP stat. 1 light-tag Eigenvar. 13 tH NLO gen. JES effective NP modelling 4 light-tag Eigenvar. 12 tZq ĬSR light-tag Eigenvar. 11 JES effective NP modelling 3 $tZq \mu_B \mu_F scale$ light-tag Eigenvar. 10 JES effective NP modelling 2 $tZq^{'}\mu_{_{F}}$ scale JES effective NP modelling 1 light-tag Eigenvar. 9 $tZq \mu_R^{\Gamma} scale$ JES effective NP mixed 3 light-tag Eigenvar. 8 tZq PS + had. light-tag Eigenvar. 7 JES effective NP mixed 2 tWZ $\mu_{R}\mu_{F}$ scale light-tag Eigenvar. 6 JES effective NP mixed 1 tWZ μ scale light-tag Eigenvar. 5 JES effective NP detector 2 $tWZ \mu$ scale light-tag Eigenvar. 4 JES effective NP detector 1 tWZ (alt. DR) light-tag Eigenvar. 3 JES relative non-closure AFII tWH $\mu_{\text{B}}\mu_{\text{F}}$ scale ntercalibration non-closure (pos n) light-tag Eigenvar. 2 tWH μ scale ntercalibration non-closure (neg η) light-tag Eigenvar. 1 tWH $\mu_{\rm B}$ scale light-tag Eigenvar. 0 tercalibration non-closure (high-E) tWH PS + had. rcalibration NonClosure 2018data c-tag Eigenvar. 19 tHq $\mu_{R}\mu_{F}$ scale tHq μ scale c-tag Eigenvar. 18 JES η intercalibration total stat c-tag Eigenvar. 17 JES η intercalibration modelling tHq $\mu_{\rm p}$ scale c-tag Eigenvar. 16 JES flavour composition tHq PS + had. c-tag Eigenvar. 15 JES flavour response tWH XS c-tag Eigenvar. 14 JES pileup ρ topology tt xs c-tag Eigenvar. 13 JES pileup pT term Minor bkg. XS c-tag Eigenvar. 12 JES pileup offset NPV Z+jets XS c-tag Eigenvar. 11 JES pileup offset μ Diboson XS c-tag Eigenvar. 10 JES Punchthrough (AFII) tWZ XS c-tag Eigenvar. 9 JES Punchthrough tZq XS JES single particle (high-pT) c-tag Eigenvar. 8 tW XS c-tag Eigenvar. 7 JES BJES Response ttz xs c-tag Eigenvar. 6 JER EffectiveNP 12restTerm tw xs c-tag Eigenvar. 5 JER EffectiveNP 11 ttH XS c-tag Eigenvar. 4 JER EffectiveNP 10 MET soft reso (parp.) JER EffectiveNP 9 c-tag Eigenvar. 3 MET soft reso (para.) c-tag Eigenvar. 2 JER EffectiveNP 8 MET soft scale c-tag Eigenvar. 1 JER EffectiveNP 7 Tau fake shape c-tag Eigenvar. 0 JER EffectiveNP 6 Tau fake norm. b-tag Eigenvar. 44 JER EffectiveNP 5 Lepton fake leading b-tag Eigenvar. 43 Lepton fake sub-leading JER EffectiveNP 4 b-tag Eigenvar. 42 JER EffectiveNP 3 RNN Tau ID syst. JER EffectiveNP 2 b-tag Eigenvar. 41 RNN Tau ID High-pT b-tag Eigenvar. 40 JER EffectiveNP 1 RNN Tau ID 3P (40) b-tag Eigenvar. 39 JER DataVsMC AFII RNN Tau ID 3P (30-40) b-tag Eigenvar. 38 JER DataVsMC MC16 RNN Tau ID 3P (25-30) b-tag Eigenvar. 37 Forward Jet-Vertex-Tagger (fJVT) RNN Tau ID 3P (20-25) b-tag Eigenvar. 36 Jet-Vertex-Tagger (JVT) RNN Tau ID 1P (40) Pile-up rew. b-tag Eigenvar. 35 RNN Tau ID 1P (30-40) b-tag Eigenvar. 34 Luminosity RNN Tau ID 1P (25-30)