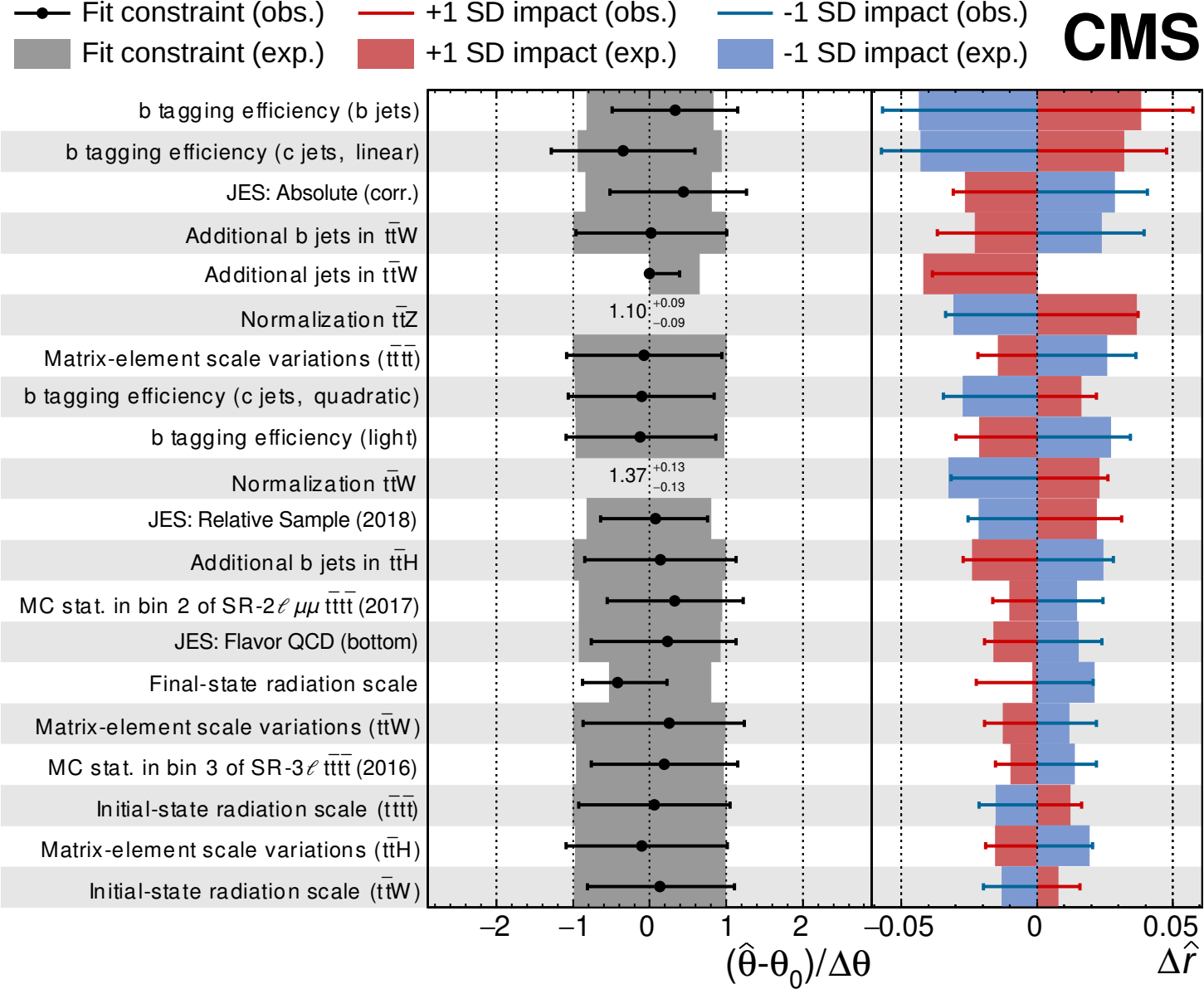
Fit constraint (obs.)
Fit constraint (exp.)
+1 SD impact (obs.)
+1 SD impact (exp.)
-1 SD impact (obs.)
-1 SD impact (exp.)
CMS
b tagging efficiency (b jets)
b tagging efficiency (c jets, linear)
JES: Absolute (corr.)
Additional b jets in $t\bar{t}W$
Additional jets in $t\bar{t}W$
Normalization $t\bar{t}Z$
1.10 +0.09 −0.09
Matrix-element scale variations ($t\bar{t}t\bar{t}$)
b tagging efficiency (c jets, quadratic)
b tagging efficiency (light)
Normalization $t\bar{t}W$
1.37 +0.13 −0.13
JES: Relative Sample (2018)
Additional b jets in $t\bar{t}H$
MC stat. in bin 2 of SR-2ℓ $\mu\mu$ $t\bar{t}t\bar{t}$ (2017)
JES: Flavor QCD (bottom)
Final-state radiation scale
Matrix-element scale variations ($t\bar{t}W$)
MC stat. in bin 3 of SR-3ℓ $t\bar{t}t\bar{t}$ (2016)
Initial-state radiation scale ($t\bar{t}t\bar{t}$)
Matrix-element scale variations ($t\bar{t}H$)
Initial-state radiation scale ($t\bar{t}W$)
−2
−1
0
1
2
$(\hat{\theta}-\theta_0)/\Delta\theta$
−0.05
0
0.05
$\Delta\hat{r}$