

Relative uncertainty source (%)	N_{jets}	H_{T}	S_{T}	$p_{\text{T}}^{\text{miss}}$	p_{T}^{W}	p_{T}^{ℓ}	$ \eta^{\ell} $
b tagging efficiency	3.2 – 4.1	3.6 – 4.7	3.6 – 5.1	3.7 – 4.9	3.7 – 5.4	3.7 – 5.6	3.7 – 4.3
Electron efficiency	1.2 – 1.4	1.3 – 1.6	1.3 – 1.9	1.4 – 1.6	1.3 – 2.3	1.2 – 3.0	1.1 – 1.5
Muon efficiency	1.7 – 1.9	1.6 – 2.2	1.4 – 2.3	1.6 – 2.3	1.2 – 2.7	1.0 – 3.0	1.0 – 1.8
JER	0.1 – 0.9	0.1 – 1.2	0.3 – 3.0	0.5 – 7.4	0.5 – 2.0	0.2 – 0.3	0.3 – 0.4
JES	1.8 – 12.6	5.7 – 16.8	5.7 – 19.4	2.7 – 12.7	2.5 – 8.6	2.5 – 5.6	5.2 – 5.6
Electron transverse momentum in $p_{\text{T}}^{\text{miss}}$	—	—	0.1 – 0.4	0.1 – 1.2	0.1 – 0.9	—	—
Muon transverse momentum in $p_{\text{T}}^{\text{miss}}$	—	—	0.1 – 1.2	0.1 – 4.4	0.1 – 1.2	—	—
Tau lepton transverse momentum in $p_{\text{T}}^{\text{miss}}$	—	—	0.1 – 1.7	0.1 – 1.6	0.1 – 1.9	—	—
Unclustered transverse momentum in $p_{\text{T}}^{\text{miss}}$	—	—	0.1 – 2.4	0.3 – 2.4	0.1 – 1.3	—	—
QCD bkg cross section	0.1 – 0.5	0.1 – 0.7	0.2 – 1.0	0.1 – 0.5	0.1 – 1.3	0.1 – 4.9	0.1 – 3.4
QCD bkg shape	<0.1	0.1 – 1.0	0.1 – 1.4	0.1 – 0.2	0.1 – 1.6	0.1 – 4.8	0.1 – 1.5
Single top quark cross section	1.1 – 1.7	1.1 – 3.5	1.1 – 5.8	1.3 – 6.3	1.1 – 8.4	1.3 – 7.4	1.4 – 1.5
V+jets cross section	0.7 – 1.1	0.6 – 3.4	0.6 – 4.6	0.7 – 3.0	0.7 – 4.5	0.6 – 6.3	0.6 – 2.6
PDF	0.2 – 1.0	0.1 – 0.8	0.2 – 0.8	0.2 – 1.0	0.1 – 0.9	0.1 – 0.9	0.3 – 0.9
Color reconnection (Gluon move)	0.1 – 2.9	0.1 – 4.1	0.1 – 11.8	0.6 – 1.3	0.3 – 1.3	0.1 – 4.7	0.1 – 2.3
Color reconnection (QCD-based)	0.1 – 2.3	0.1 – 4.4	0.2 – 6.8	0.8 – 4.6	0.1 – 3.8	0.1 – 8.0	0.1 – 1.4
Color reconnection (Early resonance decays)	0.3 – 3.9	0.1 – 7.1	0.1 – 4.1	0.2 – 2.0	0.1 – 3.8	0.2 – 5.2	0.1 – 1.3
Fragmentation	0.1 – 2.8	0.6 – 3.1	0.6 – 2.8	0.2 – 2.5	0.3 – 2.3	0.1 – 2.4	0.4 – 1.5
h_{damp}	0.8 – 4.9	0.3 – 4.1	0.1 – 4.2	0.7 – 2.3	0.2 – 4.0	0.3 – 4.6	0.6 – 2.7
Top quark mass	0.7 – 2.8	0.4 – 4.9	0.4 – 5.2	0.3 – 7.0	0.5 – 2.8	0.4 – 4.9	0.4 – 2.0
Peterson fragmentation model	0.3 – 3.9	1.6 – 3.9	1.7 – 3.7	1.0 – 3.4	0.9 – 3.2	1.2 – 3.3	1.1 – 2.6
Shower scales	3.1 – 8.0	3.6 – 8.3	3.4 – 9.7	4.8 – 7.6	5.7 – 7.3	4.3 – 8.1	4.4 – 5.8
B hadron decay semileptonic branching fraction	0.2 – 0.9	0.2 – 1.2	0.1 – 1.2	0.2 – 0.9	0.3 – 0.9	0.2 – 1.0	0.3 – 1.0
Top quark p_{T}	0.8 – 1.6	0.1 – 1.4	0.1 – 1.7	0.1 – 1.8	0.3 – 1.3	0.1 – 1.2	0.2 – 1.6
Underlying event tune	0.8 – 3.9	0.3 – 7.0	0.5 – 6.1	0.3 – 6.6	0.6 – 2.9	0.2 – 8.5	1.0 – 3.2
Simulated sample size	0.1 – 1.6	0.1 – 1.6	0.1 – 1.9	0.1 – 2.2	0.1 – 1.4	0.1 – 1.7	0.6 – 1.1
Additional interactions	0.1 – 0.4	0.1 – 0.8	0.1 – 1.3	0.3 – 1.3	0.1 – 0.6	0.1 – 0.8	0.1 – 0.3
Integrated luminosity	2.5 – 2.5	2.5 – 2.5	2.5 – 2.5	2.5 – 2.5	2.5 – 2.5	2.5 – 2.5	2.5 – 2.5
Total	10.8 – 16.5	11.2 – 19.4	11.2 – 22.0	11.3 – 19.3	10.5 – 18.5	9.0 – 17.5	9.7 – 11.4