Source	Uncertainty in	Type	Size	Affects
Jet energy scale	$\pm 1\sigma(p_{\mathrm{T}}, \eta, A)$	N & S	7.6%	All
Jet energy resolution	$\pm 1\sigma(\lvert\eta\rvert)$	N & S	3.2%	All
Pileup	$\pm 1\sigma(n_{\mathrm{PV}})$	N & S	2.9%	All
Boosted μ+jets trigger eff.	$\pm 1\sigma(p_{\mathrm{T}}, \eta)$	N & S	0.4%	Type-1/2 μ+jets
Resolved μ+jets trigger eff.	$\pm 1\sigma(p_{\mathrm{T}}, \eta)$	N & S	0.1%	Type-3 μ+jets
Boosted e+jets trigger eff.	$\pm 1\sigma(p_{\mathrm{T}}, \lvert\eta\rvert)$	N & S	18.6%	Type-1/2 e+jets
Resolved e+jets trigger eff.	$\pm 1\sigma(p_{\mathrm{T}}, \eta)$	N & S	2.5%	Type-3 e+jets
Muon ident. eff.	$\pm 1\sigma(p_{\mathrm{T}}, \lvert\eta\rvert, n_{\mathrm{PV}})$	N & S	0.4%	All μ+jets
Muon PF isolation eff.	$\pm 1\sigma(p_{\mathrm{T}}, \lvert\eta\rvert, n_{\mathrm{PV}})$	N & S	0.2%	Type-3 μ+jets
Electron ident. eff.	$\pm 1\sigma(p_{\mathrm{T}}, \lvert\eta\rvert)$	N & S	1.0%	All e+jets
b tag eff., b jets (loose)	$\pm 1\sigma(p_{\mathrm{T}}, \eta)$	N & S	2.5%	Type-1/2
b tag eff., c jets (loose)	$\pm 1\sigma(p_{\mathrm{T}}, \eta)$	N & S	1.2%	Type-1/2
b tag eff., light jets (loose)	$\pm 1\sigma(p_{\mathrm{T}}, \eta)$	N & S	6.3%	Type-1/2
b tag eff., b jets (medium)	$\pm 1\sigma(p_{\mathrm{T}}, \eta)$	N & S	1.9%	Type-3
b tag eff., c jets (medium)	$\pm 1\sigma(p_{\mathrm{T}}, \eta)$	N & S	0.8%	Type-3
b tag eff., light jets (medium)	$\pm 1\sigma(p_{\mathrm{T}}, \eta)$	N & S	1.2%	Type-3
t tag eff. (merged)	$\pm 1\sigma(p_{\mathrm{T}})$	N & S	1.6%	Type-1
t tag eff. (semimerged)	$\pm 1\sigma(p_{\mathrm{T}})$	N & S	2.2%	Type-1
t tag eff. (not merged)	$\pm 1\sigma(p_{\mathrm{T}})$	N & S	2.8%	Type-1
ISR scale	$\pm 1\sigma$	N & S	2.2%	$\mathrm{t\bar{t}}$
FSR scale	$\pm 1\sigma$	N & S	2.6%	$\mathrm{t\bar{t}}$
ME-PS matching (h_{damp})	$\pm 1\sigma$	N & S	2.5%	$\mathrm{t\bar{t}}$
CUETP8M2T4 tune	$\pm 1\sigma$	N & S	2.4%	$\mathrm{t\bar{t}}$
Color reconnection	$\pm 1\sigma$	S	2.8%	$\mathrm{t\bar{t}}$
b fragmentation	$\pm 1\sigma(x_{\mathrm{b}})$	N & S	3.7%	$\mathrm{t\bar{t}}$
b branching fraction	$\pm 1\sigma$	N & S	1.0%	$\mathrm{t\bar{t}}$
Top quark p_{T} reweighting	$\pm 1\sigma(p_{\mathrm{T}}^{\mathrm{gen,t}}, p_{\mathrm{T}}^{\mathrm{gen,\bar{t}}})$	S	2.5%	$\mathrm{t\bar{t}}$
PDF/α_S variation	NNPDF 3.0	S	1.5%	$\mathrm{t\bar{t}}$
Renormalization scale μ_{R}	$\frac{1}{2}\mu_{\mathrm{R}} \to 2\mu_{\mathrm{R}}$	S	2.6%	$\mathrm{t\bar{t}}$
Factorization scale μ_{F}	$\frac{1}{2}\mu_{\mathrm{F}} \to 2\mu_{\mathrm{F}}$	S	1.5%	$\mathrm{t\bar{t}}$
Combined $\mu_{\mathrm{R}}/\mu_{\mathrm{F}}$ scale	$\frac{1}{2} \to 2(\mu_{\mathrm{R}}$ and $\mu_{\mathrm{F}})$	S	3.8%	$\mathrm{t\bar{t}}$ MC
Integrated luminosity	$\pm 2.5\%$	N	—	All
$R_{\mathrm{q\bar{q}}}$	$\pm 1\%$	N & S	—	All $f_{\mathrm{qp*}}/f_{\mathrm{qm*}}$
$R_{\mathrm{W+jets}}$	$\pm 10\%$	N	—	All W+jets MC
$R_{\mathrm{QCD}}^{t/C/R}$ (20 params total)	$\pm 1\sigma$ (stat)	N	—	Multijet