

Source	Uncertainty	Contribution to:		Applies to samples:
		Prior	Cut-based	
Diboson cross section	50%		✓	VV only
Rare top process cross sections	50%		✓	$t\bar{t}V$ , $t\bar{t}\bar{t}\bar{t}$
Higgs cross section	50%		✓	H only
W+jets cross section	15%	✓	✓	W+jets only
Z+jets cross section	15%		✓	Z+jets only
Luminosity measurement	2.5%	✓	✓	All
Pileup reweighting	$\pm 1\sigma$	✓	✓	All simulation
Jet energy scale	$\pm 1\sigma(p_T, \eta)$	✓	✓	All simulation
Jet energy resolution	$\pm 1\sigma(\eta)$	✓	✓	All simulation
Parton distribution functions	$\pm 1\sigma$	✓	✓	$t\bar{t}$ , VLQ
$Q^2$ scale	$\pm 1\sigma$	✓	✓	$t\bar{t}$ , VLQ
CSVv2 discriminant reshaping	$\delta(\text{wgt.}, \text{unwgt.})$		✓	All simulation
BEST classification rates	$\pm 1\sigma(p_T)$		✓	Data-driven multijet
BEST classification SF	5%		✓	All simulation
BEST misclassification SF	5%		✓	All simulation
Trigger	2%	✓		All simulation
W tag scale factor	$\pm 1\sigma$	✓		All simulation
Softdrop jet mass scale	$\pm 1\sigma$	✓		All simulation
Softdrop jet mass resolution	$\pm 1\sigma$	✓		All simulation
b tag scale factor	$\pm 1\sigma$	✓		All simulation
Extrapolation fit	$\pm 1\sigma$	✓		Data-driven background
Normalization of 1W background prediction	$\pm 1.7\%$	✓		Data-driven background
Normalization of 2W background prediction	$\pm 8.6\%$	✓		Data-driven background