

Uncertainty source	$x = 0.5$ $\tilde{\tau}_1(300)$ $\tilde{\chi}_1^0(100)$	$x = 0.5$ $\tilde{\tau}_1(500)$ $\tilde{\chi}_1^0(350)$	$x = 0.5$ $\tilde{\tau}_1(800)$ $\tilde{\chi}_1^0(300)$	$x = 0.5$ $\tilde{\tau}_1(1000)$ $\tilde{\chi}_1^0(1)$	$t\bar{t}$ + single top	DY+jets	Other SM	Misid. τ_h
Signal cross section	$\pm 6.7\%$	$\pm 7.5\%$	$\pm 9.5\%$	$\pm 11\%$	—	—	—	—
FASTSIM p_T^{miss} resolution	$\pm 7.8\%$	$\pm 6\%$	$\pm 4.5\%$	$\pm 2.3\%$	—	—	—	—
τ_h FASTSIM/GEANT4	$+4.0\%$ -3.9%	$+3.1\%$ -3.0%	$+6.3\%$ -6.1%	$+15.9\%$ -14.5%	—	—	—	—
JER	$< 0.1\%$ $< 0.1\%$	-1.1% $+0.8\%$	$< 0.1\%$ $+0.11\%$	$+0.23\%$ $< 0.1\%$	$+1.3\%$ -1.3%	$+8.4\%$ -3.6%	$+1.7\%$ -3.0%	—
2018 m_{T2} uncertainty	—	—	—	—	$< 0.1\%$ $< 0.1\%$	$+0.29\%$ -0.29%	$+0.38\%$ -0.38%	—
Pileup	-0.18% $+0.18\%$	$+0.34\%$ -0.37%	$+0.12\%$ -0.11%	$< 0.1\%$ $< 0.1\%$	—	$+1.0\%$ -1.1%	-1.1% $+1.1\%$	—
JES	$+1.4\%$ -0.5%	$+0.54\%$ -0.12%	$< 0.1\%$ $< 0.1\%$	$< 0.1\%$ $< 0.1\%$	$+2.6\%$ -2.6%	$+8.5\%$ -6.0%	$+2.4\%$ -1.9%	—
τ_h ID-iso	$+6.5\%$ -8.1%	$+6.4\%$ -8.1%	$+6.6\%$ -8.1%	$+6.6\%$ -8.2%	$+6.6\%$ -8.1%	$+6.5\%$ -8.1%	$+6.8\%$ -8.1%	—
p_T^{miss} unclustered energy	$+0.47\%$ $+0.33\%$	-0.46% -0.26%	$+0.13\%$ $< 0.1\%$	$< 0.1\%$ $< 0.1\%$	$+1.2\%$ -1.2%	$+4.9\%$ -4.6%	$+1.7\%$ -0.2%	—
Background normalization	—	—	—	—	—	$\pm 15\%$	$\pm 15\%$	—
τ_h energy scale	$+2.5\%$ -2.7%	$+2.4\%$ -3.5%	$+1.1\%$ -1.3%	$+1.1\%$ -1.1%	$+1.7\%$ -1.8%	$+3.6\%$ -3.4%	$+1.7\%$ -4.6%	—
μ_R and μ_F scales	$+0.8\%$ -0.8%	$+1.7\%$ -1.8%	$+0.57\%$ -0.64%	$+0.41\%$ -0.46%	—	$+2.1\%$ -2.9%	$+4.1\%$ -3.4%	—
Luminosity	$\pm 2.1\%$	$\pm 2.2\%$	$\pm 2.1\%$	$\pm 2.1\%$	—	$\pm 2.2\%$	$\pm 2\%$	—
b tagging	$< 0.1\%$ $< 0.1\%$	$< 0.1\%$ $< 0.1\%$	$< 0.1\%$ $< 0.1\%$	$+0.14\%$ -0.15%	—	$+7.7\%$ -7.8%	$+7.9\%$ -8.0%	—
2017 p_T^{miss} uncertainty	—	—	—	—	$< 0.1\%$ $< 0.1\%$	$< 0.1\%$ $< 0.1\%$	$+1.2\%$ -1.2%	—
Trigger	$+7.9\%$ -7.5%	$+7.8\%$ -7.5%	$+8.0\%$ -7.7%	$+8.1\%$ -7.8%	$+11.8\%$ -11.2%	$+11.6\%$ -10.9%	$+11.6\%$ -10.9%	—
$t\bar{t}$ + single top SF	—	—	—	—	$\pm 3.4\%$	—	—	—
Z p_T reweighting	—	—	—	—	—	$+2.0\%$ -2.0%	—	—
τ_h misid. rate (parton flavour)	—	—	—	—	—	—	—	$+36.5\%$ -31.8%
τ_h misid. rate (LL \rightarrow TL vs. TL \rightarrow TT)	—	—	—	—	—	—	—	$+3.7\%$ -3.8%