

Systematic uncertainty	$H \rightarrow \mu\tau_h$	$H \rightarrow \mu\tau_e$	$H \rightarrow e\tau_h$	$H \rightarrow e\tau_\mu$
Muon trigger/ID/isolation	2%	2%	—	2%
Electron trigger/ID/isolation	—	2%	2%	2%
Hadronic τ_h efficiency	5%	—	5%	—
High p_T τ_h efficiency	${}^{+5}_{-35}\% \times p_T \times 0.001$	—	${}^{+5}_{-35}\% \times p_T \times 0.001$	—
b tagging veto	2.0–2.5%	2.0–2.5%	2.0–2.5%	2.0–2.5%
$\mu \rightarrow \tau_h$ background	25%	—	—	—
$e \rightarrow \tau_h$ background	—	—	12%	—
jet $\rightarrow \tau_h$ background	30% \oplus 10%	—	30% \oplus 10%	—
QCD multijet background	—	30%	—	30%
$Z \rightarrow \mu\mu/ee$ + jets background	—	0.1% \oplus 2% \oplus 5%	—	0.1% \oplus 2% \oplus 5%
$Z \rightarrow \tau\tau$ + jets background	0.1% \oplus 2% \oplus 5%	0.1% \oplus 2% \oplus 5%	0.1% \oplus 2% \oplus 5%	0.1% \oplus 2% \oplus 5%
W+jets background	—	0.8% \oplus 3.8% \oplus 5%	—	0.8% \oplus 3.8% \oplus 5%
WW, ZZ, WZ background	3.5% \oplus 5% \oplus 5%	3.5% \oplus 5% \oplus 5%	3.5% \oplus 5% \oplus 5%	3.5% \oplus 5% \oplus 5%
W+ γ background	—	10% \oplus 5%	—	10% \oplus 5%
Single top quark background	3% \oplus 5% \oplus 5%	3% \oplus 5% \oplus 5%	3% \oplus 5% \oplus 5%	3% \oplus 5% \oplus 5%
$t\bar{t}$ background	10% \oplus 5%	10% \oplus 5%	10% \oplus 5%	10% \oplus 5%
SM Higgs fact./renorm. scales	3.9 %	3.9 %	3.9 %	3.9 %
SM Higgs PDF+ α_S	3.2 %	3.2 %	3.2 %	3.2 %
Jet energy scale	3–20%	3–20%	3–20%	3–20%
τ_h energy scale	1.2%	—	1.2%	—
$\mu, e \rightarrow \tau_h$ energy scale	1.5%	—	3%	—
μ energy scale	0.2%	0.2%	—	0.2%
e energy scale	—	0.1–0.5%	0.1–0.5%	0.1–0.5%
Unclustered energy scale	$\pm 1\sigma$	$\pm 1\sigma$	$\pm 1\sigma$	$\pm 1\sigma$
IntegRated luminosity	2.5%	2.5%	2.5%	2.5%