

Systematic uncertainty	$\mu\tau_h$	$\mu\tau_e$	$e\tau_h$	$e\tau_\mu$
Muon ident. and iso.	2%	2%	—	2%
Electron ident. and iso.	—	2%	2%	2%
Trigger	2%	2%	2%	2%
$\tau_h$ ident.	$p_T$ dep. (2–3%)	—	$p_T$ dep. (2–15%)	—
$\mu \rightarrow \tau_h$ misid.	10–70%	—	—	—
$e \rightarrow \tau_h$ misid.	—	—	40%	—
btagging efficiency	<6.5%	<6.5%	<6.5%	<6.5%
Embedded bkg.	4%	4%	4%	4%
$Z \rightarrow \mu\mu$ , eebkg.	4% $\oplus$ 5%	4% $\oplus$ 5%	4% $\oplus$ 5%	4% $\oplus$ 5%
EW bkg.	4% $\oplus$ 5%	4% $\oplus$ 5%	4% $\oplus$ 5%	4% $\oplus$ 5%
W+jets bkg.	—	10%	—	10%
Diboson bkg.	5% $\oplus$ 5%	5% $\oplus$ 5%	5% $\oplus$ 5%	5% $\oplus$ 5%
$t\bar{t}$ bkg.	6% $\oplus$ 5%	6% $\oplus$ 5%	6% $\oplus$ 5%	6% $\oplus$ 5%
Single top quark bkg.	5% $\oplus$ 5%	5% $\oplus$ 5%	5% $\oplus$ 5%	5% $\oplus$ 5%
Jet $\rightarrow \tau_h$ bkg.	30% $\oplus$ 10%	—	30% $\oplus$ 10%	—
Jet energy scale	3–20%	3–20%	3–20%	3–20%
$\tau_h$ energy scale	0.7–1.2%	—	0.7–1.2%	—
$e \rightarrow \tau_h$ energy scale	1–7%	—	1–7%	—
$\mu \rightarrow \tau_h$ energy scale	1%	—	1%	—
Electron energy scale	—	1–2.5%	1–2.5%	1–2.5%
Muon energy scale	0.4–2.7%	0.4–2.7%	—	0.4–2.7%
Trigger timing inefficiency	0.2–1.3%	0.2–1.3%	0.2–1.3%	0.2–1.3%
Integrated luminosity	1.8%	1.8%	1.8%	1.8%
QCD scales (ggH)			3.9%	
QCD scales (VBF)			0.5%	
PDF + $\alpha_S$ (ggH)			3.2%	
PDF + $\alpha_S$ (VBF)			2.1%	
QCD acceptance (ggH)		–10.3 to +5.9%		
QCD acceptance (VBF)		–2.7 to +2.3%		
PDF + $\alpha_S$ acceptance (ggH)		–0.8 to +2.8%		
PDF + $\alpha_S$ acceptance (VBF)		–1.7 to +2.3%		