

Systematic source	Affected processes	Change in acceptance or shape	
		$e\tau_h$	$\mu\tau_h$
Integrated luminosity	Simulated processes		2.5%
Electron ident. & trigger	Simulated processes	2%	-
Muon ident. & trigger	Simulated processes	-	2%
$\tau_h$ ident. & trigger	Simulated processes		10%
e misidentified as $\tau_h$	$Z \rightarrow ee$	12%	-
$\mu$ misidentified as $\tau_h$	$Z \rightarrow \mu\mu$	-	25%
b tagging efficiency, mistag rate	Simulated processes		3–5%
$ \vec{p}_T^{\text{miss}} $ scale	Simulated processes		Up to 4%
W+jets normalization	W+jets		5%
QCD multijet normalization	QCD multijet		20%
Z+jets normalization	$Z \rightarrow \tau_h\tau_h$		20%
Diboson cross section	Diboson		6%
Single top quark cross section	Single top quark		5.5%
$t\bar{t}$ cross section	$t\bar{t}$ ( $b\bar{b}A$ only)		6%
$b\bar{b}A$ cross section	Signal ( $b\bar{b}A$ only)		50%
$\tau_h$ energy scale	Simulated processes		Shape
$e/\mu \rightarrow \tau_h$ energy scale	Simulated processes		Shape
Jet energy scale	Simulated processes		4%
Jet misidentified as $\tau_h$	Z+jets		Shape
Limited event count	All processes		Shape