Source	Channel				
	$e\tau_h$	$\mu\tau_h$	$\tau_h\tau_h$	$e\mu$	$\mu\mu$
Rate					
Integrated luminosity	1.2–2.5%				
Electron ID	2%	—	—	2%	—
Electron trigger	2%	—	—	—	—
Muon ID	—	2%	—	2%	2%
Muon trigger	—	2%	—	2%	2%
e misID as τ_h	12%	—	12%	—	—
μ misID as τ_h	—	25%	25%	—	—
QCD multijet	—	—	—	20%	20%
W + jets cross section	—	—	—	6%	6%
DY + jets cross section	20% in $\geq$1b, 3% otherwise				
$t\bar{t}$ cross section	5.5%				
Diboson cross section	6%				
Single t quark cross section	5.5%				
Vγ + jets cross section	5%				
Electroweak W/Z boson cross section	10%				
Triboson cross section	25%				
Jet energy scale	5% in 0j				
p_T^{miss} scale	Up to 4%				
Shape					
τ_h trigger	—	—	$\pm$1 s.d. in the SF	—	—
τ_h ID efficiency	$\pm$1 s.d. in SF, p_T extrapolation			—	—
τ_h energy scale	$\pm$1 s.d. on the energy scale			—	—
Energy scale μ misID as τ_h	$\pm$1% on the energy scale			—	—
Energy scale e misID as τ_h	$\pm$1 s.d. on the energy scale			—	—
FF shape variations	Syst. shape variations			—	—
b tagging efficiency	$\pm$1 s.d. in b tagging SFs				
b tagging mistag rate	$\pm$1 s.d. in b tagging SFs				
Jet energy scale	$\pm$1 s.d. in SF in 0b, $\geq$1b				
Jet energy resolution	$\pm$1 s.d. in SF in 0b, $\geq$1b				
ECAL trigger timing	$\pm$1 s.d. in SF				
PDF variations	Envelope of PDF variations				
μ_R & μ_F variations	Envelope of scale variations				
Z boson p_T reweighting	Weight applied $\pm$50%				
t quark p_T reweighting	Ref. [141] with larger variations				