Uncertainty source	Shape	$e\tau_h$	$\mu\tau_h$	$e\tau_h\tau_h$	$\mu\tau_h\tau_h$	Years	Categories
			Category			Correlated across	
Experimental							
Integrated luminosity	—		1.2–2.5			$\checkmark^\dagger$	$\checkmark$
Trigger efficiency	$\checkmark$	0.9–4.2	0.5–2.9	1.2–3.0	0.1–0.3	—	$\checkmark$
Trigger timing inefficiency	$\checkmark$		—	0.1–0.3	0.1–0.3	—	$\checkmark$
Pileup	$\checkmark$	0.2–2.9	0.1–1.6	0.1–5.5	0.1–2.3	$\checkmark$	$\checkmark$
Electron identification	$\checkmark$	0.1–2.4	—	0.1–1.9	—	$\checkmark$	$\checkmark$
Muon identification	$\checkmark$	—	0.4–1.6	—	0.1–1.1	$\checkmark$	$\checkmark$
Lepton veto	—	0.1–2.0	0.1–2.0	0.1–2.0	0.1–2.0	—	$\checkmark$
τ_h identification	$\checkmark$	0.1–3.6	0.1–3.2	4.2–5.2	4.3–5.3	—	$\checkmark$
τ_h energy scale	$\checkmark$	0.2–1.8	0.2–0.4	0.8–1.5	0.8–1.2	—	$\checkmark$
$e \to \tau_h$ misidentification	$\checkmark$	0.2–1.5	0.1–0.4	0.3–0.6	0.2–0.6	—	$\checkmark$
$\mu \to \tau_h$ misidentification	$\checkmark$	0.1–1.6	0.1–0.3	0.1–0.3	0.1–0.3	—	$\checkmark$
Jet energy scale	$\checkmark$	1.1–4.9	1.2–4.2	1.6–3.6	1.6–2.4	$\checkmark$	$\checkmark$
Jet energy resolution	$\checkmark$	0.3–3.1	0.3–3.1	1.1–4.6	1.2–3.1	—	$\checkmark$
b jet identification	$\checkmark$	2.5–5.4	2.5–5.1	2.4–4.2	3.2–4.2	—	$\checkmark$
b jet misidentification	$\checkmark$	2.4–4.1	2.2–4.5	1.0–2.6	1.7–2.5	—	$\checkmark$
Unclustered energy scale	$\checkmark$	0.1–1.9	0.2–1.5	0.5–1.7	0.3–2.4	—	$\checkmark$
t^{res} tagging	$\checkmark$	1.5–7.6	1.3–7.5	—	—	—	$\checkmark$
t^{res} mistagging	$\checkmark$	1.7–4.9	1.7–5.4	—	—	—	$\checkmark$
$j \to \tau_h$ misidentification	$\checkmark$	17.8–21.1	18.2–22.4	14.8	10.5	—	—
Theoretical							
Top quark mass (*topquark − antiquarkpair*)	—		2.2			$\checkmark$	$\checkmark$
Top quark mass (single t)	—		2.8			$\checkmark$	$\checkmark$
Acceptance H$^\pm$ (renormalization and factorization (RF) scale, PDF)	—		5.3			$\checkmark$	$\checkmark$
Acceptance top quark-antiquark pair (renormalization and factorization (RF) scale, PDF)	—		−2.8 to +2.0			$\checkmark$	$\checkmark$
Acceptance single t (renormalization and factorization (RF) scale, PDF)	—		−2.0 to +0.3			$\checkmark$	$\checkmark$
Acceptance t$\bar{t}$X (renormalization and factorization (RF) scale, PDF)	—		2.0			$\checkmark$	$\checkmark$
Acceptance EW (renormalization and factorization (RF) scale, PDF)	—		<1.0			$\checkmark$	$\checkmark$
Cross section top quark-antiquark pair (renormalization and factorization (RF) scale, PDF)	—		−4.8 to 5.5			$\checkmark$	$\checkmark$
Cross section single t (renormalization and factorization (RF) scale, PDF)	—		5.3			$\checkmark$	$\checkmark$
Cross section t$\bar{t}$X (renormalization and factorization (RF) scale, PDF)	—		2.2			$\checkmark$	$\checkmark$
Cross section EW (renormalization and factorization (RF) scale, PDF)	—		5.4			$\checkmark$	$\checkmark$