

Uncertainty		Process			Correlated across		
		Sim.	$\tau$ -emb.	$F_F$	Variation	Years	Processes
$\tau$ -emb.	Acceptance	—	✓	—	4%	—	—
	$t\bar{t}$ fraction	—	✓	—	0.1–10%	—	—
$\mu$	Id	✓	✓	—	2%	✓	✓
	Trigger	✓	✓	—	2.0%	—	✓
$p_\mu$ scale	$p_\mu$ scale	✓	✓	—	0.1–2.0%	✓	✓
	Id	✓	✓	—	2%	✓	✓
e	Trigger	✓	✓	—	2%	—	✓
	$E_e$ scale	✓	✓	—	See text	✓	✓
	Id	✓	✓	—	3–5%	—	✓
$\tau_h$	Trigger	✓	✓	—	5–10%	—	✓
	$E_{\tau_h}$ scale	✓	✓	—	0.2–1.1%	—	✓
$\mu \rightarrow \tau_h$	Miss-Id	✓	—	—	10–70%	—	—
	$E_{\tau_h}$ scale	✓	—	—	2%	—	—
$e \rightarrow \tau_h$	Miss-Id	✓	—	—	40%	—	—
	$E_{\tau_h}$ scale	✓	—	—	1.0–2.5%	—	—
Z boson $p_T$ reweighting		✓	—	—	10–20%	✓	—
$E_{\text{Jet}}$ scale & resolution		✓	—	—	0.1–10%	✓	✓
b-jet (miss-)Id		✓	—	—	1–10%	—	✓
$p_T^{\text{miss}}$ calibration		✓	—	—	See text	✓	✓
ECAL timing shift		✓	—	—	2–3%	✓	✓
t quark $p_T$ reweighting		✓	—	—	See text	✓	—
Luminosity		✓	—	—	2.3–2.5%	✓	✓
Process normalizations		✓	—	—	See text	✓	—
Signal acceptance		✓	—	—	18–20%	✓	—
$F_F$	Statistics	—	—	✓	3–5%	—	—
	Non-closure	—	—	✓	10%	—	—
	Non- $F_F$ processes	—	—	✓	7%	—	—
	$F_F$ proc. composition	—	—	✓	7%	—	—