

Source	Uncertainty			Samples
	1ℓ	2–3 ℓ 2017	2–3 ℓ 2018	
Luminosity	1.6%	2.3%	2.5%	MC
μ ID + Iso	4.3%	2.5–7.5%	2.5–7.5%	MC
eReco + Iso	3.1%	1.4–4.2%	1.8–5.4%	MC
eID		$\pm\sigma(p_T, \eta)$		MC
Pileup		$\sigma_{incl.} \pm 4.6\%$		MC
Trigger prefiring		$\pm\sigma$		MC
Jet energy scale		$\pm\sigma(p_T, \eta)$		MC
Jet energy res.		$\pm\sigma(\eta)$		MC
1, 3 ℓ b tag: b/c		$\pm\sigma(p_T)$		MC
1, 3 ℓ b tag: light		$\pm\sigma(p_T)$		MC
Ren./Fact. scale		env($\times 2, \times 0.5$)		MC
PDF		$\pm\sigma$		MC
e trigger	$\pm\sigma(p_T, \eta)$	—	—	MC
μ trigger	$\pm\sigma(p_T, \eta)$	—	—	MC
H_T W+jets corr.	env(upper, lower fits)	—	—	W+jets
H_T $t\bar{t}$ corr.	$\pm\sigma$	—	—	$t\bar{t}$
DeepAK8: light	$-\sigma$	—	—	MC
DeepAK8: light (Higgs)	$\pm\sigma$	—	—	MC
DeepAK8: heavy eff.	$\pm 25\%/jet/ flavor$	—	—	MC
DeepAK8: heavy mis.	$\pm 25\%/jet/ flavor$	—	—	MC
ee trigger	—	$\pm\sigma(p_T, \eta)$		MC
$e\mu$ trigger	—	$\pm\sigma(p_T, \eta)$		MC
$\mu\mu$ trigger	—	$\pm\sigma(p_T, \eta)$		MC
Charge misid.	—	34.5%	60.0%	OS
2 ℓ e/ μ prompt rate	—	$\pm\sigma(p_T, \eta)$		NP
2 ℓ e NP rate	—	NP rate+0.07	NP rate+0.08	NP
2 ℓ μ NP rate	—	NP rate–0.02		NP
3 ℓ e prompt rate	—	1.0–6.6%	0.9–7.3%	NP
3 ℓ μ prompt rate	—	1.0–6.6%	1.2–5.5%	NP
3 ℓ ℓ NP rate	—	3.9–23.0%	1.4–24.6%	NP
3 ℓ μ NP rate in $\eta(\mu)$	—	0–38.7%	1.0–1.4%	NP
3 ℓ e/ μ NP rate	—	$\pm\sqrt{\sigma_{gaus}^2 + \sigma_{t\bar{t}(SR-CR2)}^2}$		NP