

| Uncertainty | Value or formula | | | Affected |
|--------------------------------------|----------------------------------|------------------------|---------------------|------------|
| | 1ℓ | 2– 3ℓ 2017 | 2– 3ℓ 2018 | Samples |
| Integrated luminosity | 1.6% | 2.3% | 2.5% | MC |
| e reconstr. and iso. | 3.1% | 1.4–4.2% | 1.8–5.4% | MC |
| e identification | $\pm\sigma(p_T, \eta)$ | same | same | MC |
| μ ident. and iso. | 4.3% | 2.5–7.5% | 2.5–7.5% | MC |
| Pileup | $\sigma_{\text{inel}} \pm 4.6\%$ | same | same | MC |
| L1 trigger timing | $\pm\sigma(p_T, \eta)$ | same | same | MC |
| Jet energy scale | $\pm\sigma(p_T, \eta)$ | same | same | MC |
| Jet energy res. | $\pm\sigma(\eta)$ | same | same | MC |
| 1, 3ℓ b tag: b/c | $\pm\sigma(p_T)$ | same | same | MC |
| 1, 3ℓ b tag: light | $\pm\sigma(p_T)$ | same | same | MC |
| Ren./fact. scales | env($\times 2, \times 0.5$) | same | same | MC |
| PDF | $\pm\text{RMS}$ (Hessian) | same | same | 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. | $\pm\sigma(H_T)$ | — | — | $t\bar{t}$ |
| DEEPAK8: light q/g | +0, $-\sigma(\text{score})$ | — | — | MC |
| DEEPAK8: light q/g (H jets) | $\pm\sigma(\text{score})$ | — | — | MC |
| DEEPAK8: heavy eff. | $\pm 25\%$ /jet/ flavor | — | — | MC |
| DEEPAK8: heavy misid. | $\pm 25\%$ /jet/ flavor | — | — | MC |
| ee trigger | — | $\pm\sigma(p_T, \eta)$ | same | MC |
| $e\mu$ trigger | — | $\pm\sigma(p_T, \eta)$ | same | MC |
| $\mu\mu$ trigger | — | $\pm\sigma(p_T, \eta)$ | same | MC |
| Charge misid. | — | 34.5% | 60.0% | OS |
| 2ℓ e/ μ prompt rate | — | $\pm\sigma(p_T, \eta)$ | same | NP |
| 2ℓ e NP rate | — | NP rate+0.07 | NP rate+0.08 | NP |
| 2ℓ μ NP rate | — | NP rate–0.02 | same | NP |
| 3ℓ e prompt rate | — | 1.0–6.6% | 0.9–7.3% | NP |
| 3ℓ μ prompt rate | — | 1.0–6.6% | 1.2–5.5% | NP |
| 3ℓ e NP rate | — | NP rate ± 0.010 | same | NP |
| 3ℓ μ NP rate | — | NP rate ± 0.022 | NP rate ± 0.014 | NP |
| 3ℓ NP bkgd., by flavor | — | 3.9–23.0% | 1.4–24.6% | NP |
| 3ℓ μ NP rate in $\eta(\mu)$ | — | 10.0–38.7% | 1.0–1.4% | NP |