

Source of uncertainty	Typical values
Integrated luminosity	2.5%
Pileup	<5%
Cross sections of SM processes	For processes calculated at LO: 50% For higher-order calculations: varies
Parton distribution functions	Following PDF4LHC [?] recommendations
Value of $\alpha_S$	Variations of $\pm 0.0015$ around central value (0.118)
Electron, muon, and photon energy scales	0.15–7.00%
Jet energy scale and resolution	3–5%
Unclustered energy	Varies, typically 0–15 GeV
Reconstruction and identification efficiency	Varies, <10%
Misidentification uncertainties	50%
MC statistical uncertainty	Varies, up to 30%