

Uncertainty source	Magnitude	Type	Processes	Impact	Correlation
Statistical	1–100%	Per event	All MC samples	1–100%	No
Integrated luminosity	1.2–2.5%	Per event	Conversion/Rare/Signal	1.2–2.5%	Yes
Pileup	5%	Per event	All MC samples	<5%	Yes
Trigger efficiency	1–4%	Per lepton	All MC samples	<2%	No
Electron reco., ID and iso. efficiency	1–5%	Per lepton	All MC samples	1–3%	No
Muon reco., ID and iso. efficiency	1–5%	Per lepton	All MC samples	1–3%	No
Tau lepton reco., ID and iso. efficiency	5–15%	Per lepton	All MC samples	5–25%*	No
Electron energy scale and resolution	<2%	Per lepton	All MC samples	<10%*	Yes
Muon energy scale and resolution	2%	Per lepton	All MC samples	<10%*	No
Tau lepton energy scale	<10%	Per lepton	All MC samples	<5%*	No
Lepton displacement veto efficiency	1–2%	Per lepton	All MC samples	3–5%	No
b tagging efficiency	1–10%	Per jet	All MC samples	1–5%	No
Jet energy scale	1–10%	Per jet	All MC samples	<10%	No
Unclustered energy scale	1–25%	Per event	All MC samples	<3%	No
Electron charge misidentification	30%	Per lepton	All MC samples	<1%	No
WZ normalization	3–5%	Per event	WZ	3–5%	No
ZZ normalization	4–5%	Per event	ZZ	4–5%	No
t $\bar{t}$ Z normalization	15–25%	Per event	t $\bar{t}$ Z	15–25%	No
Conversion normalization	10–50%	Per event	Z $\gamma$ /Conversion	10–50%	No
Rare normalization	50%	Per event	Rare	50%	No
Prompt and misidentification rates	20–60%	Per lepton	MisID	20–50%*	No
DY-t $\bar{t}$ process dependence	5–25%	Per lepton	MisID	5–25%	Yes
Diboson jet multiplicity modeling	<30%	Per event	WZ/ZZ	<30%	No
Diboson $p_T$ modeling	<30%	Per event	WZ/ZZ	1–10%	No