

Source of uncertainty	$X \rightarrow WW \rightarrow 2\ell 2\nu$	$X \rightarrow WW \rightarrow \ell\nu 2q$	$X \rightarrow WW \rightarrow \ell\nu 2q$
		Resolved	Boosted
Experimental sources			
Integrated luminosity	2.5%	2.5%	2.5%
Lepton trigger*	2%	1%	1%
Lepton reconstruction & ident.*	1–3%	1–2%	1–2%
Electron energy scale*	0.1–1%	0.2–1%	0.1–1%
Muon momentum scale*	0.1–1%	0.1–1%	0.1–1%
Jet energy scale*	1–10%	1–6%	1–3%
Jet energy resolution*	—	0.5–2%	0.3–1%
$p_T^{\text{miss}}$ *	0.1–1%	1–3%	0.1–1%
b tagging/mistag*	0.1–5%	0.1–1%	0.1–1%
W tagging ( $\tau_{21}$ )	—	—	6%
W tagging (extrapolation)	—	—	1–13%
W $m_J$ scale	—	—	0.1–1%
W $m_J$ resolution	—	—	2–5%
Background estimates			
WW	6–45%	10%	10%
top quark	3–5%	7–9%	8–10%
W+jets	30%	5–11%	4–20%
QCD multijet	—	10%	10%
DY	5–20%	10%	10%
Theoretical sources			
PDF and $\alpha_S$ (acceptance)*	1–4%	1–4%	1–7%
Renorm./factor. scales (acceptance)*	1–6%	1–18%	1–18%
PDF and $\alpha_S$ ( $\sigma_X$ )	2–16%	2–4%	2–16%
Renorm./factor. scales ( $\sigma_X$ )	0.2–9%	0.2–4%	0.2–9%
Jet multiplicity categorization ( $\sigma_{gg \rightarrow X}$ )*	5–20%	—	—
WW $p_T^{\text{WW}}$ reweighting*	3–10%	—	—
WW UE & PS	5–10%	—	—
DY $p_T^{\text{miss}}$ reweighting*	0.2–1%	—	—