

Systematic source	Run 2 scenario	YR18 scenario
QCD scale, EW ZZ signal	1–10% (shape)	5%
PDF, EW ZZ signal	8% (shape)	4%
QCD scale, QCD qqZZ background	8–12% (shape)	6%
PDF, QCD qqZZ background	3% (shape)	1.5%
QCD ggZZ background	10%	10% or varied
Luminosity	2.6%	1%
Trigger efficiency	2%	1%
Lepton reco and selection efficiency	6/4/2%	2/1/0.5%
JES, EW ZZ signal	1–5% (shape)	1%
JER, EW ZZ signal	1–2% (shape)	1%
JES, QCD qqZZ background	10–20% (shape)	10%
JER, QCD qqZZ background	3–6% (shape)	1%