

Summary of relative systematic uncertainties

Common experimental uncertainties

Luminosity	6.2 %
Lepton identification/reconstruction efficiencies	6 – 11 %

Background related uncertainties

QCD scale ($q\bar{q} \rightarrow ZZ, gg \rightarrow ZZ$)	3 – 10 %
PDF set ($q\bar{q} \rightarrow ZZ, gg \rightarrow ZZ$)	3 – 5 %
Electroweak corrections ($q\bar{q} \rightarrow ZZ$)	1 – 15 %
$gg \rightarrow ZZ$ K factor	10 %
Reducible background (Z+X)	40 – 55 %
Event categorization (experimental)	2 – 18 %
Event categorization (theoretical)	3 – 20 %

Signal related uncertainties

QCD scale ($q\bar{q} \rightarrow \text{VBF/VH}, gg \rightarrow \text{H}/\text{t}\bar{\text{t}}\text{H}$)	3 – 10 %
PDF set ($q\bar{q} \rightarrow \text{VBF/VH}, gg \rightarrow \text{H}/\text{t}\bar{\text{t}}\text{H}$)	3 – 4 %
$\text{BR}(\text{H} \rightarrow \text{ZZ} \rightarrow 4\ell)$	2 %
Lepton energy scale	0.04 – 0.3 %
Lepton energy resolution	20 %
Event categorization (experimental)	2 – 15 %
Event categorization (theoretical)	8 – 20 %