

Backgrounds estimated from data

Source	Uncertainty
$q\bar{q} \rightarrow WW$	8–18% (0,1-jet)
$t\bar{t}, tW$	$\sim 10\%$ (0,1-jet); $\sim 30\%$ (2-jet)
$Z/\gamma^* \rightarrow \tau^-\tau^+$	$\sim 10\%$
W + jet, QCD multijet	$\sim 40\%$
$W\gamma/\gamma^*$	20–30%

Experimental uncertainties

Source	Uncertainty
Integrated luminosity	2.2% at 7 TeV 2.5% at 8 TeV
Lepton reconstruction and identification	3–4%
Jet energy scale	10%

Theoretical uncertainties

Source	Uncertainty
$q\bar{q} \rightarrow WW$	20% (2-jet)
WZ, ZZ, VVV	$\sim 4\%$
QCD scale uncertainties:	
On-shell signal	20% (GF); 2% (VBF)
Off-shell signal	25% (GF); 2% (VBF)
Bkg. and sig. + bkg. interf.	35% (GF); 2% (VBF)
Exclusive jet bin fractions	30–50% (GF); 3–11% (VBF)
PDFs	3–8%
Underlying event and parton shower	20% (GF); 10% (VBF)