

CMS Source	Uncertainty [%]	
	7 TeV	8 TeV
Trigger	1.3	1.2
Lepton (mis-)ID/isolation	1.5	1.5
Lepton energy scale	0.2	0.1
JES total	0.8	0.9
Jet energy resolution	0.1	0.1
$b$ -jet ID	0.5	0.5
$b$ -jet mis-ID	0.2	0.1
Pile-up	0.3	0.3
$tW$ background	1.0	0.6
Drell–Yan background	1.4	1.3
Non- $e\mu$ $t\bar{t}$	0.1	0.1
$t\bar{t}V$ background	0.1	0.1
Diboson background	0.2	0.6
$W$ +jets/QCD background	0.1	0.2
$t\bar{t}$ scale choice	0.3	0.6
ME/PS matching	0.1	0.1
ME generator	0.4	0.5
Hadronisation (JES)	0.7	0.7
Top-quark $p_T$ modelling	0.3	0.4
Colour reconnection	0.1	0.2
Underlying event	0.1	0.1
PDF	0.2	0.3
Integrated luminosity	2.2	2.6
Statistical	1.2	0.6
$t\bar{t}$ scale choice (extrapolation)	+0.1 −0.4	+0.2 −0.1
ME/PS matching (extrapolation)	+0.1 −0.1	+0.3 −0.3
Top-quark $p_T$ (extrapolation)	+0.5 −0.3	+0.6 −0.3
PDF (extrapolation)	+0.1 −0.1	+0.1 −0.1
<b>Total uncertainty</b>	+3.6 −3.5	+3.7 −3.5