

Source	Contribution (%)
Integrated luminosity	1.2
Muon detection	2.1 – 4.5
Muon $p_T$ scale	1.5
Muon $d_{IP}$ uncertainty	0.4 – 1.2
Vertex reconstruction	2.0
Beam line uncertainty	0.2 – 1.0
MLP training models	1.5 – 3.6
Muon isolation	2.2
LLP mass scale	0.8 – 1.5
Models statistics	1.7 – 2.5
Sub-total 8 TeV dataset	4.9 – 6.5
(Sub-total 7 TeV dataset	4.9 – 6.1)
Parton luminosity	3 – 7
Analysis with fast simulation	5