

Source	Uncertainty ( $\times 10^{-3}$ )							
	$e^+e^-$		$e^\mp\mu^\pm$		$\mu^+\mu^-$		Combined	
	$A_{\mathcal{O}_1}$	$A_{\mathcal{O}_3}$	$A_{\mathcal{O}_1}$	$A_{\mathcal{O}_3}$	$A_{\mathcal{O}_1}$	$A_{\mathcal{O}_3}$	$A_{\mathcal{O}_1}$	$A_{\mathcal{O}_3}$
Luminosity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pileup	0.3	0.0	0.0	0.0	0.1	0.8	0.1	0.2
Lepton Identification	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Lepton Isolation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trigger	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electron momentum scale/smearing	1.2	1.1	0.2	0.2	—	—	0.3	0.2
Muon momentum scale	—	—	0.1	0.2	2.3	1.0	0.5	0.3
JES	1.9	0.6	0.1	0.2	2.3	0.7	0.7	0.3
JER	2.0	0.7	0.3	0.2	1.2	0.3	0.6	0.2
b tagging	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Normalization of background models	0.3	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Limited simulated background sample size	2.9	2.9	0.6	0.6	2.3	2.3	0.7	0.7
PDF	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.1
ME–PS matching	0.8	1.4	0.3	0.7	0.8	1.5	0.4	0.9
Color reconnection	1.9	3.8	1.6	1.0	1.0	0.9	1.5	1.1
Underlying event	0.6	0.9	1.4	1.1	1.4	1.0	1.4	1.0
ISR	1.5	1.8	0.2	0.2	0.3	0.5	0.3	0.3
FSR	1.0	1.9	0.8	0.6	0.6	0.3	0.7	0.6
Hadronization	2.0	0.5	0.6	0.3	1.7	0.2	0.9	0.3
$m_t$	0.9	0.1	0.4	0.2	0.0	0.1	0.4	0.1
top quark $p_T$	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charge misidentification	0.8	0.8	0.4	0.4	0.1	0.1	0.3	0.3
Total systematic uncertainty	5.6	6.0	2.6	2.0	5.0	3.5	2.8	2.2