Course	Plead /Cional massass	Voor to moon broatmont	ee bkgd.	ee signal	μμ bkgd.	μμ signal
Source	Bkgd./Signal process	Year-to-year treatment	(%)	(%)	(%)	(%)
Integrated luminosity	All bkgd./Signal	Correlated	1.8 (1.8)	1.8 (1.8)	1.8 (1.8)	1.8 (1.8)
Electron reconstruction	All bkgd./Signal	Correlated	1.0-1.6 (0.5-0.8)	0.8-1.4 (0.4-0.8)	_	_
Electron energy resolution	All bkgd./Signal	Correlated	< 0.1 (< 0.1)	< 0.1 (< 0.1)	_	_
Electron energy scale	All bkgd./Signal	Correlated	0.5-1.8 (0.5-2.3)	0-0.3 (0-0.5)	_	_
Electron identification	All bkgd./Signal	Correlated	3.1-3.3 (1.8-1.9)	4.1-4.4 (2.1-2.4)	_	_
Electron trigger	All bkgd./Signal	Uncorrelated	0-0.1 (0.2-0.4)	< 0.1 (0.1-0.2)	_	_
Muon reconstruction	All bkgd./Signal	Correlated	_	_	0.4-1.0 (0.3-0.7)	4.4-36.8 (5.6-30.7)
Muon momentum scale	All bkgd./Signal	Correlated	_	_	0.4-2.5 (0.5-3.7)	0.1-0.2 (0.1-0.3)
Muon identification	All bkgd./Signal	Correlated	_	_	0.2-1.2 (0.1-0.6)	0.2-1.1 (0.1-0.5)
Muon isolation	All bkgd./Signal	Correlated	_	_	0.1-0.2 (0-0.1)	0.1-0.2 (0-0.1)
Muon trigger	All bkgd./Signal	Uncorrelated	_	_	0.1-0.2 (0.1-0.2)	0.7-1.6 (0.5-1.3)
Jet energy scale	All bkgd./Signal	Correlated	1.9-4.4 (0.9-1.9)	0-0.2 (0-0.3)	2.1-3.5 (0.6-0.9)	0-0.2 (0-0.4)
Jet energy resolution	All bkgd./Signal	Uncorrelated	0.5-1.5 (0.7-2.0)	0-0.3 (0-0.4)	0.2-1.3 (0.2-1.1)	0-0.3 (0-0.3)
Jet mass scale	All bkgd./Signal	Correlated	< 0.1 (1.0–1.8)	< 0.1 (0.1–1.0)	< 0.1 (1.4–1.7)	< 0.1 (0.2–1.0)
LSF scale factor	All bkgd./Signal	Uncorrelated	— (6.7–8.7)	— (6.7–8.7)	— (5.8 – 7.1)	— (5.8–7.1)
Pileup modeling	All bkgd./Signal	Correlated	0.2-1.1 (0.5-1.1)	0.1-0.8 (0.2-0.9)	0.3-0.5 (0.2-1.1)	0.1-0.5 (0-0.6)
Z- $p_{\rm T}$ correction, MC stat.	DY+jets	Correlated	0.6-2.0 (0.6-2.0)	_	0.6-2.0 (0.6-2.0)	_
Z - p_T correction, QCD scale	DY+jets	Correlated	6.3-7.1 (6.7-7.3)	_	6.1-7.1 (6.8-7.4)	_
Z - p_T correction, QCD PDF error	DY+jets	Correlated	0.6-2.0 (0.6-2.0)	_	0.6-2.0 (0.6-2.0)	_
Z- $p_{\rm T}$ correction, QCD PDF $\alpha_{\rm S}$	DY+jets	Correlated	0.8-4.7 (0.8-5.2)	_	0.8-4.7 (0.8-5.3)	_
Z-p _T correction, EW1 [?]	DY+jets	Correlated	< 0.1 (< 0.1)	_	< 0.1 (< 0.1)	_
Z-p _T correction, EW2 [?]	DY+jets	Correlated	0.3 (0.3)	_	0.3 (0.3)	_
Z-p _T correction, EW3 [?]	DY+jets	Correlated	0.1(0.1)	_	0.1 (0-0.1)	_
DY reshape	DY+jets	Correlated	8.5-9.1 (10.1-11.6)	_	8.5-9.2 (9.7-11.6)	_
Nonprompt background normalization	Nonprompt	Uncorrelated	100 (100)	_	100 (100)	_
Rare SM background normalization	Others	Correlated	50 (50)	_	50 (50)	_
PDF error	Signal	Correlated	_	5.9-11.1 (8.8-39.9)	_	2.8-6.8 (17.5-40.6)
α_S	Signal	Correlated	_	0-0.2 (0.2-1.3)	_	0-0.2 (0.2-1.2)
renormalization/factorization scales	Signal	Correlated		0-0.1 (0.3-2.3)	_	0-0.1 (2.1-2.9)