atlas_phys_2014_010 CutFlow

ATLAS
atlas_phys_2014_010
ATLAS-PHYS-2014-010
2-6 jets + etmiss
Energy: 14 TeV
Luminosity: 300 fb^{-1}
Montecarlo: Herwig++, MadGraph

Signal region	all	
Process	$\tilde{g}\tilde{g} \to q\bar{q}\tilde{\chi}_1^0 q\bar{q}\tilde{\chi}_1^0$	
Point	$m(\tilde{g}) = 1950$ GeV, $\quad m(\tilde{\chi}_1^0) = 1$ GeV	
Source	ATLAS	CheckMATE
Generated events	–	24466.0
SR2jl	68.8 ± 0.6	100 ± 1.5
SR2jm	12.5 ± 0.3	16.5 ± 0.6
SR3j	35.4 ± 0.5	47.6 ± 1
SR4jl	18.4 ± 0.3	18.2 ± 0.63
SR4jm	70.6 ± 0.7	94 ± 1.4
SR4jt	102.4 ± 0.8	116 ± 1.6
SR5j	83.4 ± 0.7	114 ± 1.6
SR6jl	25.6 ± 0.4	32.4 ± 0.85
SR6jm	44.6 ± 0.5	64.6 ± 1.2
SR6jt	35.4 ± 0.5	48.4 ± 1

Table 1: Cutflow validation for atlas_phys_2014_010. Shown are number of events passing each cut normalised to a luminosity of 300 fb^{-1}. Final error is Monte-Carlo events only.

Signal region	all	
Process	$\tilde{g}\tilde{g} \to q\bar{q}\tilde{\chi}_1^0 q\bar{q}\tilde{\chi}_1^0$	
Point	$m(\tilde{g}) = 1425$ GeV, $\quad m(\tilde{\chi}_1^0) = 1400$ GeV	
Source	ATLAS	CheckMATE
Generated events	–	24447.0
SR2jl	12.6 ± 1.2	4.85 ± 1.3
SR2jm	3.7 ± 0.6	0.746 ± 0.53
SR3j	8.5 ± 1	3.36 ± 1.1
SR4jl	7.5 ± 0.9	4.48 ± 1.3
SR4jm	8.1 ± 0.9	3.73 ± 1.2
SR4jt	6.2 ± 0.8	1.87 ± 0.83
SR5j	4.7 ± 0.7	4.48 ± 1.3
SR6jl	1.6 ± 0.4	2.61 ± 0.99
SR6jm	1.05 ± 0.3	0.373 ± 0.37
SR6jt	1.05 ± 0.3	0.373 ± 0.37

Table 2: Cutflow validation for atlas_phys_2014_010. Shown are number of events passing each cut normalised to a luminosity of 300 fb^{-1}. Final error is Monte-Carlo events only.

Signal region	all	
Process	$\tilde{q}\tilde{q} \to q\tilde{\chi}_1^0 q\tilde{\chi}_1^0$	
Point	$m(\tilde{g}) = 1050$ GeV, $\quad m(\tilde{\chi}_1^0) = 900$ GeV	
Source	ATLAS	CheckMATE
Generated events	–	500000.0
SR2jl	2.5 ± 1.1	2.55 ± 0.48
SR2jm	1.5 ± 0.9	0.274 ± 0.16
SR3j	2.0 ± 1.0	2.28 ± 0.46
SR4jl	3.5 ± 1.3	3.65 ± 0.58
SR4jm	6.4 ± 1.8	5.75 ± 0.72
SR4jt	4.0 ± 1.4	3.28 ± 0.55
SR5j	7.4 ± 1.9	6.57 ± 0.77
SR6jl	3.5 ± 1.3	3.65 ± 0.58
SR6jm	1.5 ± 0.9	1 ± 0.3
SR6jt	1.5 ± 0.9	0.912 ± 0.29

Table 3: Cutflow validation for atlas_phys_2014_010. Shown are number of events passing each cut normalised to a luminosity of 300 fb^{-1}. Final error is Monte-Carlo events only.

Signal region	all	
Process	$\tilde{q}\tilde{q} \rightarrow q\tilde{\chi}_1^0 q\tilde{\chi}_1^0$	
Point	$m(\tilde{g}) = 2250$ GeV, $\quad m(\tilde{\chi}_1^0) = 1$ GeV	
Source	ATLAS	CheckMATE
Generated events	450.0	10000.0
SR2jl	141.7 ± 0.9	147 ± 2.6
SR2jm	60.1 ± 0.6	56.8 ± 1.6
SR3j	82.1 ± 0.7	85.4 ± 2
SR4jl	39.2 ± 0.5	39.4 ± 1.3
SR4jm	59.3 ± 0.6	64.9 ± 1.7
SR4jt	58.9 ± 0.6	63 ± 1.7
SR5j	28.4 ± 0.4	31.5 ± 1.2
SR6jl	7.8 ± 0.2	10.2 ± 0.68
SR6jm	8 ± 0.2	10 ± 0.67
SR6jt	7.6 ± 0.2	9.31 ± 0.65

Table 4: Cutflow validation for atlas_phys_2014_010. Shown are number of events passing each cut normalised to a luminosity of 300 fb^{-1}. Final error is Monte-Carlo events only.