

$\tilde{\chi}_1^\pm(100) \rightarrow W^\pm \tilde{\chi}_1^0(0)$  (**ATLAS\_2014\_I1286761 (1403.5294)**)

- Process:  $\tilde{\chi}_1^+ \tilde{\chi}_1^- : \tilde{\chi}_1^\pm \rightarrow W^\pm \tilde{\chi}_1^0$ .
- Mass:  $m_{\tilde{\chi}_1^\pm} = 100$  GeV,  $m_{\tilde{\chi}_1^0} = 0$  GeV.
- The number of events:  $5 \cdot 10^4$ .
- Event Generator: **Herwig++ 2.5.2**.

#	cut name	$\epsilon_{\text{Exp}}$	$\epsilon_{\text{Atom}}$	$\frac{\text{Atom}}{\text{Exp}}$	$\frac{(\text{Exp}-\text{Atom})}{\text{Error}}$	#/?	$R_{\text{Exp}}$	$R_{\text{Atom}}$	$\frac{\text{Atom}}{\text{Exp}}$	$\frac{(\text{Exp}-\text{Atom})}{\text{Error}}$
0	= 2 OSlep $p_T > 35, 20$ : SF	100.0	100.0							
1	Jet Veto: SF	$49.5 \pm 1.96$	$68.02 \pm 3.24$	<b>1.37</b>	4.88	0	$0.49 \pm 0.02$	$0.68 \pm 0.03$	<b>1.37</b>	4.88
2	Z Veto: SF	$40.81 \pm 1.78$	$53.67 \pm 2.88$	<b>1.31</b>	3.79	1	$0.82 \pm 0.04$	$0.79 \pm 0.04$	<b>0.96</b>	-0.64
3	WWa: $p_T(\ell\ell) > 80$ : SF	$6.85 \pm 0.73$	$7.96 \pm 1.11$	1.16	0.83	2	$0.17 \pm 0.02$	$0.15 \pm 0.02$	<b>0.88</b>	-0.72
4	WWa: METrel $> 80$ : SF	$4.06 \pm 0.56$	$5.46 \pm 0.92$	<b>1.34</b>	1.3	3	$0.59 \pm 0.08$	$0.69 \pm 0.12$	<b>1.16</b>	0.66
5	WWa: $m_{\ell\ell} < 120$ : SF	$2.77 \pm 0.46$	$4.21 \pm 0.81$	<b>1.52</b>	1.54	4	$0.68 \pm 0.11$	$0.77 \pm 0.15$	<b>1.13</b>	0.47

Table 1: The cut-flow table for the same flavour channel.

#	cut name	$\epsilon_{\text{Exp}}$	$\epsilon_{\text{Atom}}$	$\frac{\text{Atom}}{\text{Exp}}$	$\frac{(\text{Exp}-\text{Atom})}{\text{Error}}$	#/?	$R_{\text{Exp}}$	$R_{\text{Atom}}$	$\frac{\text{Atom}}{\text{Exp}}$	$\frac{(\text{Exp}-\text{Atom})}{\text{Error}}$
0	= 2 OSlep $p_T > 35, 20$ : DF	100.0	100.0							
1	Jet Veto: DF	$49.93 \pm 1.96$	$65.23 \pm 3.15$	<b>1.31</b>	4.12	0	$0.5 \pm 0.02$	$0.65 \pm 0.03$	<b>1.31</b>	4.12
2	Z Veto: DF	$49.93 \pm 1.96$	$65.23 \pm 3.15$	<b>1.31</b>	4.12	1	$1.0 \pm 0.04$	$1.0 \pm 0.05$	<b>1.0</b>	0.0
3	WWa: $p_T(\ell\ell) > 80$ : DF	$7.69 \pm 0.77$	$6.46 \pm 1.0$	<b>0.84</b>	-0.98	2	$0.15 \pm 0.02$	$0.1 \pm 0.02$	<b>0.64</b>	-2.53
4	WWa: METrel $> 80$ : DF	$4.82 \pm 0.61$	$3.69 \pm 0.75$	<b>0.77</b>	-1.16	3	$0.63 \pm 0.08$	$0.57 \pm 0.12$	<b>0.91</b>	-0.39
5	WWa: $m_{\ell\ell} < 120$ : DF	$3.29 \pm 0.5$	$3.08 \pm 0.69$	<b>0.93</b>	-0.25	4	$0.68 \pm 0.1$	$0.83 \pm 0.19$	<b>1.22</b>	0.7

Table 2: The cut-flow table for the different flavour channel.