

$\tilde{\mu}^\pm(250) \rightarrow \mu^\pm \tilde{\chi}_1^0(10)$ (**ATLAS_2014_I1286761 (1403.5294)**)

- Process: $\tilde{\mu}^+ \tilde{\mu}^- : \tilde{\mu}^\pm \rightarrow \mu^\pm \tilde{\chi}_1^0$.
- Mass: $m_{\tilde{\mu}} = 250$ GeV, $m_{\tilde{\chi}_1^0} = 10$ GeV.
- The number of events: $2 \cdot 10^3$.
- Event Generator: **Herwig++ 2.5.2**.

| # | cut name | ϵ_{Exp} | ϵ_{Atom} | $\frac{\text{Atom}}{\text{Exp}}$ | $\frac{(\text{Exp}-\text{Atom})}{\text{Error}}$ | #/? | R_{Exp} | R_{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 | 37.89 ± 1.09 | 50.2 ± 1.63 | 1.32 | 6.26 | 0 | 0.38 ± 0.01 | 0.5 ± 0.02 | 1.32 | 6.26 |
| 2 | Z veto: SF | 36.52 ± 1.07 | 48.63 ± 1.62 | 1.33 | 6.24 | 1 | 0.96 ± 0.03 | 0.97 ± 0.03 | 1.01 | 0.11 |
| 3 | $m_{T2} > 90$: SF | 22.85 ± 0.85 | 29.52 ± 1.37 | 1.29 | 4.14 | 2 | 0.63 ± 0.02 | 0.61 ± 0.03 | 0.97 | -0.51 |
| 4 | $m_{T2} > 20$: SF | 17.77 ± 0.75 | 23.26 ± 1.25 | 1.31 | 3.78 | 3 | 0.78 ± 0.03 | 0.79 ± 0.04 | 1.01 | 0.19 |
| 5 | $m_{T2} > 150$: SF | 13.67 ± 0.65 | 16.91 ± 1.09 | 1.24 | 2.56 | 4 | 0.77 ± 0.04 | 0.73 ± 0.05 | 0.95 | -0.71 |

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