

Squark decays beyond MFV at LHC

Mass	$\sigma(u_1u_1)$	$\sigma(u_2u_2)$
500	0.3596	0.359
600	0.1234	0.123
700	0.0478	0.0477
800	0.0202	0.0201
900	0.009	0.009
1000	0.0043	0.0043

Table 1: *Mixing $\alpha = 0$. Cross-sections are in pb.*

Mass (m_{u_1})	$\sigma(u_1u_2)$ ($\alpha = \frac{\pi}{2}$)	$\sigma(u_1u_2)$ ($\alpha = \frac{\pi}{4}$)
500	1.34×10^{-10}	5.29×10^{-5}
600	0.988×10^{-10}	3.90×10^{-5}
700	0.734×10^{-10}	2.89×10^{-5}
800	0.545×10^{-10}	2.16×10^{-5}
900	0.407×10^{-10}	1.61×10^{-5}
1000	0.307×10^{-10}	1.21×10^{-5}

Table 2: *Masses are in GeV and Cross-sections are in pb. Fixed $m_{u_2} = 1$ TeV.*

Mass (m_{u_2})	$\sigma(u_1u_2)$ ($\alpha = \frac{\pi}{2}$)	$\sigma(u_1u_2)$ ($\alpha = \frac{\pi}{4}$)
500	1.25×10^{-9}	4.93×10^{-4}
600	8.22×10^{-10}	3.25×10^{-4}
700	5.52×10^{-10}	2.17×10^{-4}
800	3.75×10^{-10}	1.48×10^{-4}
900	2.59×10^{-10}	1.02×10^{-4}
1000	1.82×10^{-10}	7.17×10^{-5}

Table 3: *Masses are in GeV and Cross-sections are in pb. Fixed $m_{u_1} = 400$ GeV.*

Mass	BR($u_1 \rightarrow t\chi_1^0$)	BR($u_1 \rightarrow c\chi_1^0$)	BR($u_2 \rightarrow t\chi_1^0$)	BR($u_2 \rightarrow c\chi_1^0$)
500	0.44	0.56	0.44	0.56
600	0.456	0.544	0.457	0.543
700	0.468	0.532	0.469	0.531
800	0.476	0.524	0.476	0.524
900	0.48	0.52	0.48	0.52
1000	0.485	0.515	0.485	0.515

Table 4: *Mixing* $\alpha = \frac{\pi}{4}$

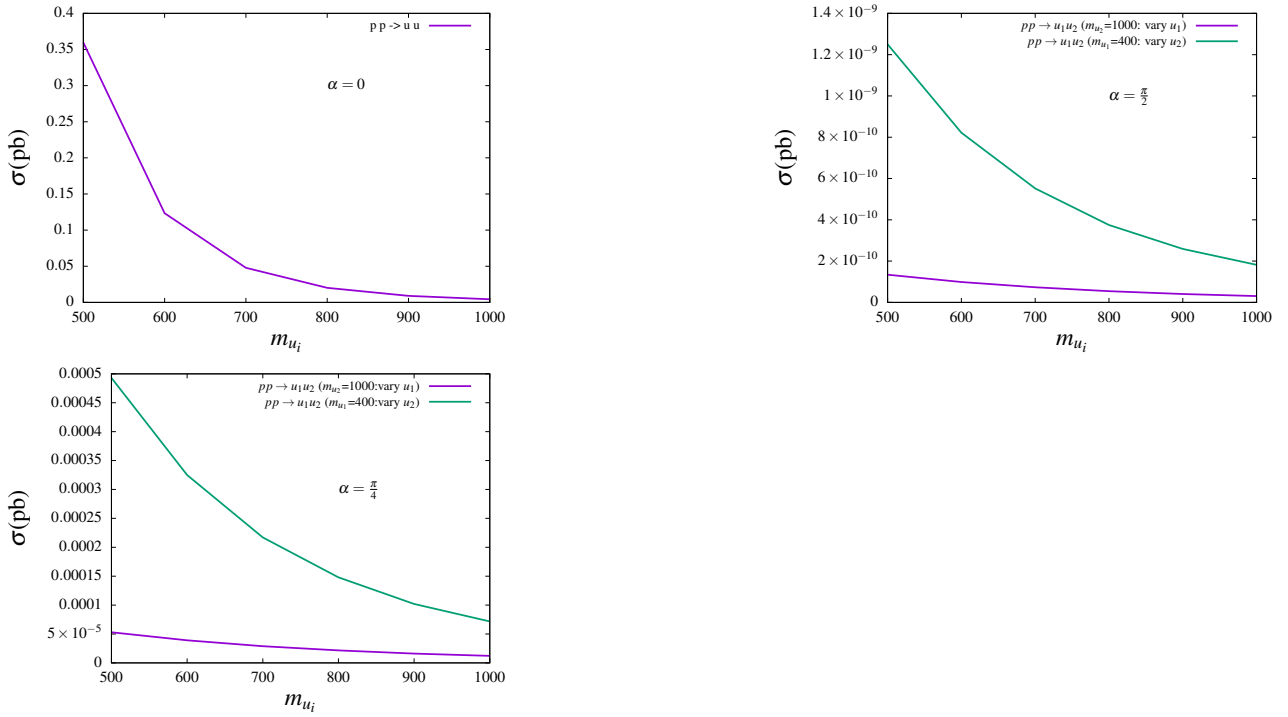


Figure 1: