

Overview of SUSY results: gluino pair production

137 fb⁻¹ (13 TeV)

$pp \rightarrow \tilde{g}\tilde{g}$

$\tilde{g} \rightarrow t\bar{t}\tilde{\chi}_1^0$

0 ℓ : arXiv:1909.03460;1908.04722,2103.01290

1 ℓ : arXiv:1911.07558

2 ℓ same-sign and $\geq 3\ell$: arXiv:2001.10086

$\tilde{g} \rightarrow b\bar{b}\tilde{\chi}_1^0$

0 ℓ : arXiv:1909.03460;1908.04722

$\tilde{g} \rightarrow q\bar{q}\tilde{\chi}_1^0$

0 ℓ : arXiv:1909.03460;1908.04722

$\tilde{g} \rightarrow q\bar{q}(\tilde{\chi}_1^\pm/\tilde{\chi}_2^0) \rightarrow q\bar{q}(W/Z)\tilde{\chi}_1^0$

0 ℓ : arXiv:1908.04722

BF($\tilde{\chi}_1^\pm:\tilde{\chi}_2^0$) = 2:1, $x = 0.5$

2 ℓ same-sign and $\geq 3\ell$: arXiv:2001.10086

BF($\tilde{\chi}_1^\pm:\tilde{\chi}_2^0$) = 2:1, $x = 0.5$

0

500

1000

1500

2000

mass scale [GeV]

Selection of observed limits at 95% C.L. (theory uncertainties are not included). Probe **up to** the quoted mass limit for light LSPs unless stated otherwise. The quantities ΔM and x represent the absolute mass difference between the primary sparticle and the LSP, and the difference between the intermediate sparticle and the LSP relative to ΔM , respectively, unless indicated otherwise.