

$\tilde{g}\text{-}\tilde{g}$ production, $\tilde{g}\rightarrow q\bar{q}\tilde{\chi}_1^0$, $\tilde{\chi}_1^0\rightarrow q\bar{q}q$



Expected limit ($\pm 1\sigma_{\text{exp}}$)



Observed limit ($\pm 1\sigma_{\text{SUSY}}^{\text{theory}}$)

All limits at 95% CL

ATLAS

$\sqrt{s} = 8\text{ TeV}, 20.3\text{ fb}^{-1}$

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

Unevaluated Due to UDD Radiation Uncertainties

$m_{\tilde{\chi}_1^0}$ [GeV]

$m_{\tilde{g}}$ [GeV]

0.017

0.011

0.009

0.008

0.007

0.007

0.007

0.008

0.008

0.009

0.010

0.012

0.013

0.016

0.026

0.017

0.014

0.014

0.015

0.015

0.015

0.019

0.023

0.023

0.031

0.039

0.028

0.021

0.022

0.022

0.023

0.027

0.031

0.046

0.057

0.097

0.087

0.042

0.042

0.046

0.050

0.057

0.280

0.130

0.075

0.081

0.086

0.095

0.230

0.272

0.160

0.179

0.191

0.634

0.474

0.468

0.480

1.848

1.750

1.793

0.059

0.059

0.010

0.013

0.016

0.023

0.031

0.046

0.057

0.081

0.086

0.095

0.095

0.160

0.179

0.272

0.272

0.474

0.474

0.634

0.634

400

600

800

1000

1200

1400