

$\tilde{g}\text{-}\tilde{g}$ 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 ($\pm 1\sigma_{\text{SUSY theory}}$)

All limits at 95% CL

ATLAS

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

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

1000

500

400

600

800

1000

1200

1400

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

$\tilde{g}\rightarrow q\bar{q}\tilde{\chi}_1^0$ forbidden
Unevaluated Due to UDD Radiation Uncertainties

0.027

0.018

0.024

0.016

0.035

0.018

0.014

0.047

0.025

0.016

0.012

0.036

0.022

0.016

0.012

0.031

0.022

0.015

0.012

0.032

0.023

0.016

0.013

0.033

0.024

0.018

0.014

0.034

0.024

0.019

0.014

0.038

0.029

0.021

0.017

0.044

0.034

0.026

0.021

0.020