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Erratum: Minimal flavour violation with hierarchical squark masses

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ABSTRACT: We correct a mistake in the expression of the anomalous dimension matrix for the QCD running of two quark — two gluino operators given in JHEP 12 (2010) 070. The correction leads to a slight increase of the lower bound on the heavy squark masses.

Equation (4.6) for $\hat{\gamma}_{gg}$ should be:

$$\hat{\gamma}_{gg} = \begin{pmatrix} \frac{n_{\ell}}{4} & 0 & -6\\ 0 & -\frac{3N}{2} + \frac{n_{\ell}}{4} & -\frac{3N}{2} + \frac{6}{N}\\ -3 & -\frac{3N}{2} & -\frac{3}{2}N + \frac{n_{\ell}}{4} \end{pmatrix}.$$

where n_{ℓ} is the number of light squarks $(\tilde{t}_L, \tilde{t}_R, \tilde{b}_L, \text{ i.e. } n_{\ell} = 3 \text{ in our context})$.

As a consequence figure 1 of JHEP 12 (2010) 070 is slightly modified to figure 1 here.

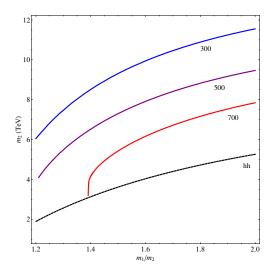


Figure 1. Lower bounds on m_2 as a function of the ratio $r = m_1/m_2$ to obtain effective MFV. For a given light mass, $m_l = 300$, 500, 700 GeV, the allowed region is above the corresponding line, from $\mathcal{L}_{12.3}^{\Delta S=2}$, and in any case above the "hh" line, from $\mathcal{L}_{12}^{\Delta S=2}$, which is m_l independent.