Non-Minimal Flavour Violation in the MSSM from a flavoured SU(5) GUT

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We study flavour-violation in a SU(5) setup inspired by flavoured GUTs. We investigate the impact of various observables at low scales on the high-energy parameters of the theory including mu->e gamma and the relic density of dark matter. An interesting interplay between the quark and lepton sectors becomes apparent due to the cohabitation of various fields in representations of the unifying group. Correlations between high scale parameters in the context of current experimental flavour data are shown to manifest. We show that movement away from the Minimal Flavour Violation paradigm is perfectly possible within the context of current limits.

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