

The MSSM with degenerate (GUT scale) Higgs mass matrix

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Certain supersymmetric grand unified models predict that the coefficients of the quadratic terms in the MSSM Higgs potential should be degenerate at the GUT scale. We discuss some examples for such models, and we analyse the implications of this peculiar condition of a GUT-scale degenerate Higgs mass matrix for low-scale MSSM phenomenology. To this end we explore the parameter space which is consistent with existing experimental constraints by means of a Markov Chain Monte Carlo analysis. This talk is based on arXiv:1007.0321 and JHEP 0908:011 .

Primary author: Mr FICHET, Sylvain (LPSC)

Presenter: Mr FICHET, Sylvain (LPSC)

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