



Contribution ID: 438

Type: talk

## An MCMC study of non-minimal flavour violation in the MSSM

*Saturday, July 25, 2015 9:45 AM (15 minutes)*

We present an extensive study of non-minimally flavour violating (NMFV) elements in the Lagrangian of the Minimal Supersymmetric Standard Model (MSSM). We impose a variety of theoretical and experimental constraints and perform a detailed scan of the parameter space by means of a Markov-Chain Monte-Carlo (MCMC) setup. To our knowledge, this represents the first study of several non-zero flavour-violating elements within the MSSM. We present the results of the MCMC scan with a special focus on the flavour-violating parameters and related observables at the LHC. Based on these results, we define benchmark scenarios for studies of NMFV effects at the LHC.

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**Session Classification:** Flavour Physics and Fundamental Symmetries

**Track Classification:** Flavour Physics and Fundamental Symmetries