Portoroz 2011: The Role of Heavy Fermions in Fundamental Physics

Contribution ID: 15

Type: not specified

Minimal Flavour Violation and Two-Higgs doublet Models.

Monday 11 April 2011 16:55 (25 minutes)

We construct extensions of the Standard Model with two Higgs doublets, where there are flavour changing neutral currents both in the quark and leptonic sectors, with their strength fixed by the fermion mixing matrices V_{CKM} and V_{PMNS} . These models are an extension to the leptonic sector of the class of models previously considered by Branco, Grimus and Lavoura, for the quark sector. We consider both the cases of Dirac and Majorana neutrinos and identify the minimal discrete symmetry required in order to implement the models in a natural way.

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Session Classification: BSM 1