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## Probing flavor changing neutral currents and CP violation in the two-Higgs doublet model

*Sunday, 5 May 2013 10:15 (30 minutes)*

We discuss the formulation of the general two-Higgs doublet model type III, which incorporates flavor changing neutral scalar interactions (FCNSI) and CP violation from several sources. FCNSI and CP violation can arise from Yukawa terms meanwhile Higgs potential can contribute as source of explicit or spontaneous CP violation. We discuss the case that includes CP violation with Yukawa textures to control FCNSI and evaluate the branching fractions for some Higgs scalar, which may allow to test the patterns of FCNSI and CP violation, that arises in these models.

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