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Collider phenomenology of new neutral scalars in a flavoured multi-Higgs model

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In this presentation, I discuss collider signatures with a focus on new physics scenarios that are predicted in various classes of multi-Higgs doublet models. A thorough analysis of one of these signatures is conducted in the context of the Large Hadron collider, based on a topology with two charged leptons and 4 jets arising from first/second generation chiral quarks. I discuss how the kinematics of the scalar fields can be used to efficiently separate the signal from the dominant backgrounds and its implications in future runs of the LHC.

In-person participation

Yes

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