

Theory of Higgs bosons with large couplings to light quarks

A common lore has arisen that extended Higgs sectors should couple preferentially to third-generation fermions. In this talk we present natural and motivated theories where extra Higgs bosons couple preferentially to the light quarks instead.

This possibility opens up the avenue for a broader exploration of the Higgs sector, which requires new theoretical and experimental efforts targeting BSM physics with large couplings to first- and second-generation quarks.

Such theories point to striking new phenomenological signatures, that provide interesting connections between searches at colliders and flavor experiments.

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