
Higgs and Flavor

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The SM Higgs

- Two important properties
 - Flavor diagonal
 - Couplings obey “mass universality”
- Why we have these properties? They are closely related to the facts that
 - We have just one Higgs
 - The Higgs is the only source of fermion masses
- These properties are very delicate
 - These properties are closely related to the fact that in the SM all FCNCs are absent at tree-level

BSM Higgs

If there are other Higgses, what is their flavor issues?

- H^+ : CKM universality, $\lambda_{ij} \propto V_{ij}$
- How can we classify such BSM Higgs sector?
- Anything else smart to say about extra Higgses?

The questions

- How can we build models that violate the SM properties?
 - How they are related to the issues of FCNC from the Z ?
 - How can we do it “naturally”?
- What pattern of “partial” violation can we have?
 - FCNC only in the up sector
 - Universality within each type of fermions
- Can we come with smart new ideas to probe Higgs and flavor?