Contribution ID: **505** Type: **poster**

Quark flavour violation in h^0 -> b bbar in the MSSM at one-loop level

We compute the width of the decay h^0(125 GeV) -> b bbar at next-to-leading order in the general MSSM with quark flavour violation (QFV). We study the effect of mixing between the second and the third generation of squarks, taking into account the constraints on QFV from B meson data. We discuss the renormalisation for the process as well as the enhancement of the bottom-quark self-energy contributions to the width for large tanb and their resummation. We show numerical results on the decay width GAMMA(h^0 -> b bbar) as a function of the involved QFV parameters and compare it with the corresponding width in the Standard Model.

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Track Classification: Higgs and New Physics