



Contribution ID: 468

Type: Poster

Phenomenological aspects of the fermion and scalar sectors of a S_4 flavored 3-3-1 model.

We proposed a viable and predictive model based on the $SU(3)_C \times SU(3)_L \times U(1)_X$ gauge symmetry, supplemented by the global $U(1)_{Lg}$ symmetry, the S_4 family symmetry and several auxiliary cyclic symmetries, which successfully reproduces the experimentally observed SM fermion mass and mixing pattern. The tiny active neutrino masses are generated through an inverse seesaw mechanism mediated by right-handed Majorana neutrinos. The model is consistent with the SM fermion masses and mixings and successfully accommodates the current Higgs diphoton decay rate constraints as well as the constraints arising from oblique S, T and U parameters and we studied the meson mixing due to flavor changing neutral currents mediated by heavy scalars, finding parameter space consistent with experimental constraints.

Authors: MORA URRUTIA, maria (USM); CARCAMO, antonio (USM); MARCHANT, juan manuel (USM); SALINAS-ARIZMENDI, Daniel (Universidad Técnica Federico Santa María)

Presenter: MORA URRUTIA, maria (USM)

Session Classification: Poster session