Contribution ID : **141** Type : **not specified**

Chiral two-Higgs doublet models and flavor-changing neutral currents at tree level

Abstract

We know that there are no flavor-changing neutral currents in the standard model at tree level. However, within two-Higgs doublet model extensions, these currents are generated, so mechanisms must be included that avoid them. Proposed mechanisms as discrete symmetries or mass-matrix proportionality assumptions are artificial and forced. Here we consider chiral-scalar doublet models, and show these avoid such currents at tree level. Further justification for chiral models derives from the facts that a projection reproduces the standard model, and that they are predicted within the (7+1)-dimensional spin-extended model.

Primary author(s) : Mr. DOMÍNGUEZ, Santiago (IFUNAM)

Co-author(s) : Dr. BESPROSVANY, Jaime (Instituto de Física)

Presenter(s) : Mr. DOMÍNGUEZ, Santiago (IFUNAM)