Contribution ID: **79**   Type: **Short Talk (5')**

Systematic study of 3-3-1 models without exotic electric charges

Friday 3 December 2021 11:30 (5 minutes)

We review in a systematic way how anomaly free $SU(3)_c \otimes SU(3)_L \otimes U(1)_x$ models without exotic electric charges can be constructed, using as basis closed sets of fermions which includes each one the particles and antiparticles of all the electrically charged fields. Our analysis reproduce not only the known models in the literature, but also shows the existence of several more independent models for one and three families not considered so far. An analysis of one of the new models is done, where the mass scales, the gauge boson masses and the masses for the spin 1/2 particles is presented.

Authors: ROJAS, Eduardo (Universidad de Nariño); BEANVIDES, Richard; ANTONIO PONCE GUTIERREZ, WILLIAM; GIRALDO ÚSUGA, Yithsbey (Universidad de Nariño)

Presenter: GIRALDO ÚSUGA, Yithsbey (Universidad de Nariño)

Session Classification: Theory - Phenomenology

Track Classification: Theory - Phenomenology