



ID de la contribución : 59

Tipo : **Contributed talk**

Left-right supersymmetry at the TeV scale

lunes, 23 de mayo de 2016 17:30 (20)

We present a supersymmetric left-right model which predicts gauge coupling unification close to the string scale and both extra vector bosons and vector-like quarks at the TeV scale. The subtleties in constructing a model which is in agreement with the measured quark masses and mixing for such a low left-right breaking scale are discussed. It is shown that in the constrained version of this model radiative breaking of the gauge symmetries is possible and a SM-like Higgs is obtained. Additional CP-even scalars of a similar mass or even much lighter are possible. The expected mass hierarchies for the supersymmetric states differ clearly from those of the constrained MSSM. In particular, the lightest down-type squark, which is a mixture of the sbottom and extra vector-like states, is always lighter than the stop.

Primary author(s) : Dr. STAUB, Florian (CERN); Dr. KRAUSS, Manuel E. (Bonn University); Dr. HIRSCH, Martin (Instituto de Fisica Corpuscular, CSIC - Universidad de Valencia); OPFERKUCH, Toby (Universität Bonn); POROD, Werner (Uni. Würzburg)

Presenter(s) : OPFERKUCH, Toby (Universität Bonn)

Clasificación de la sesión : SUSY 1

Clasificación de temáticas : SUSY/Higgs/BSM