ID de Contribution: **75** Type: **Ordinary**

Z' bosons and friends

mardi 15 mars 2011 09:20 (15 minutes)

I will explain how SU(3)xSU(2)xU(1) gauge invariance can be used to classify all possible extra vector bosons in arbitrary extensions of the Standard Model. The full symmetry also restricts their interactions significantly, and leads to a model independent parametrization. I will then present updated/new limits on the couplings and masses of the new vector particles, arising from global fits to electroweak precision data. I will also discuss the interplay with Higgs physics and the possibility of relaxing the limits when several extra particles are included in the analysis. Finally, I will comment on LHC searches.

Auteur principal: Dr PEREZ-VICTORIA, Manuel (University of Granada)

Co-auteurs: Prof. DEL AGUILA, Francisco (University of Granada); Dr DE BLAS, Jorge (University of Notre Dame)

Orateur: Dr PEREZ-VICTORIA, Manuel (University of Granada)

Classification de Session: Beyond the Standard Model

Classification de thématique: Theory