Contribution ID: **66** Type: **not specified**

A weakly constrained W'at the early LHC

Thursday, 28 April 2011 17:50 (10 minutes)

We study, within an effective approach, the phenomenology of a charged W' vector which transforms as an isosinglet under the Standard Model gauge group. We discuss bounds from present data, finding that these are quite weak for suitable choices of the right-handed quark mixing matrix. Then we study the resonant production at the early LHC of such a weakly constrained W'. We start discussing the reach in the dijet final state, which is one of the channels where the first W' signal would most likely appear, and then we analyse prospects for the more challenging discovery of W' decays into Wγ and WZ. We show in particular that the former can be used to gain insight on the possibly composite nature of the resonance.

Presenter: Mr SALVIONI, Ennio (Università di Padova)

Session Classification: Sessione Dottorandi - II

Track Classification: Dottorandi e Posters