Rencontres de Moriond EW 2011



ID de Contribution: 57

Type: YSF (Young Scientists Forum)

Neutrino masses from new generations

vendredi 18 mars 2011 19:34 (6 minutes)

We reconsider the possibility that Majorana masses of the three known neutrinos are generated radiatively by the presence of a fourth generation with both Dirac and Majorana masses. We find that the observed light neutrino mass hierarchy is not compatible with the usual experimental tests of the Standard Model in this minimal scenario, but all present data can be accommodated with five generations. Within this framework, we explore the parameter space regions which are currently allowed and lead to observable effects in lepton flavour and lepton number violating experiments.

Auteur principal: M. HERRERO GARCÍA, Juan (IFIC/UV)

Co-auteurs: M. APARICI, Alberto (IFIC/UV); Dr SANTAMARÍA, Arcadi (IFIC/UV); Dr RIUS, Nuria (IFIC/UV)

Orateur: M. HERRERO GARCÍA, Juan (IFIC/UV)

Classification de Session: Yound Scientist Forum 3

Classification de thématique: Theory