

4th generation searches at ATLAS

Thursday, 14 June 2012 17:20 (40 minutes)

Among the places to look for deviations from the SM are new quarks families that can appear as a fourth family with Higgs, a “strong” fourth family without Higgs or vector-like quarks. A potential extension for the SM would be the adjonction a 4th family of heavy chiral fermions that could provide new sources of CP violation to explain the matter-antimatter asymmetry in the Universe, and allow for a heavier Higgs boson while remaining consistent with other precision electroweak studies. This poster will review various searches for 4th generation quarks performed using data collected in 7 TeV LHC proton-proton collisions with the ATLAS detector.

Primary author: NEKTARIJEVIC, Snezana (Universite de Geneve (CH))

Presenter: NEKTARIJEVIC, Snezana (Universite de Geneve (CH))

Session Classification: Poster session

Track Classification: Top Quark Physics