

Searches for Leptoquark Pair-Production in Dilepton+Dijet and Lepton+MET+Dijet Final States with the CMS Detector

Monday, 4 June 2012 18:00 (0:20)

Abstract content

Searches for the pair-production of leptoquarks are presented with the full 2011 pp collision data collected with the CMS detector at the LHC. Search channels include the first, second, and third generation in decay modes with either two leptons or a lepton and missing energy, and two jets. The results exhibit good understanding of the detector and modeling of the standard model backgrounds. With event selections optimized for each channel, decay mode, and mass hypothesis, data is found to agree well with the standard model background prediction. Limits are set on the leptoquark mass and pair-production cross-sections which are the most stringent to date.

Primary author(s) : Mr. BAUMGARTEL, Darin (Northeastern University/CMS)

Presenter(s) : Mr. BAUMGARTEL, Darin (Northeastern University/CMS)

Session Classification : BSM

Track Classification : Particles