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Search for Standard Model Higgs boson decaying into 4 leptons with CMS detector

Saturday, July 7, 2012 6:00 PM (1 hour)

A search for a Higgs boson in the four-lepton decay channel Higgs to ZZ(*), with each Z boson decaying to an electron or muon pair, is presented using 4.7 fb-1 of integrated luminosity collected during 2011 as well as considerable fraction of 2012 integrated luminosity recorded by the CMS detector in pp collisions from the LHC at CM energy of 7 TeV. The search covers Higgs boson mass hypotheses of 110 < mH < 135 GeV/c2 and 305 < mH < 340 GeV/c2. Upper limits at 95% CL on the product of the cross section and branching ratio as well as the p-value for the Standard Model Higgs boson are presented.

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