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SM Higgs search in 4-lepton final state with ATLAS

Tuesday 18 August 2009 14:00 (1 minute)

Please give a brief summary of your poster

The discovery potential of the ATLAS detector at the LHC for a neutral SM Higgs boson decaying to purely leptonic final states, that is H-> ZZ(*)-> 4 leptons (electrons or muons), is presented. The signal is characterized by the presence of isolated leptons associated to the main pp interaction vertex in the events, and constitutes the most promising channel for SM Higgs discovery in the mass region 130<mH<700 GeV at LHC. Analysis techniques for the signal reconstruction and for the background rejection are discussed

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