Search for contact interactions in the di-lepton channel with CMS

Thursday, 14 June 2012 09:00 (15 minutes)

A search for contact interactions has been performed using the dimuon mass spectrum based on LHC data of 5.3 fb-1 produced from proton-proton collisions and collected by the CMS detector in 2011 at center-ofmass energy of 7 TeV. Unlike the expectation from the contact interaction process, no significant deviation in the dimuon mass spectrum from the spectrum predicted by the standard model is observed. 95% C.L. lower limits are set on the energy scale parameter Lambda for both destructive [9.5 TeV] and constructive [13.0 TeV] interference in the left-left isoscalar model, which are the most stringent limits to date. Details of the 2011 results and the planned extension for such a search in the same model [left-left isoscalar] in the di-muon and di-electron channel at 8 TeV using data taken this year will be discussed.

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