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Search for Excited Leptons in pp collisions at \sqrt{s} = 7 TeV

In this poster, a search for compositeness in electrons and muons carried out with the CMS detector in pp collision at the LHC at $\sqrt{s}=7$ TeV with 5.0 fb⁻¹ of data, is presented. The search has been performed for an associated production of a lepton and an oppositely charged excited lepton $pp \rightarrow l\bar{l}^*$ followed by the decay $l^* \rightarrow l + \gamma$ resulting in the $l\bar{l} + \gamma$ final state, where $l=e,\mu$. This search has been done assuming that excited leptons (l^*) are produced via contact interactions. The number of events observed in data is consistent with the expected standard model background. The 95% confidence upper limits are reported for l^* production at this collision energy and the exclusion region in the $\Lambda-M(l^*)$ parameter space.

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