

Abstract Submitted
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Search for high mass resonances in the dielectron channel in pp collisions at $\sqrt{s} = 7$ TeV VLADLEN TIMCIUC, California Institute of Technology, CMS COLLABORATION — A search for a narrow resonance in the dielectron channel has been performed at the CMS Experiment. The data were collected using the CMS detector at the Large Hadron Collider. A total integrated luminosity of 35 pb^{-1} of data from pp collisions at center-of-mass energy of 7 TeV was used for this analysis. The dielectron mass spectrum is found to be in agreement with expectations from Standard Model processes and an upper limit on the cross section ratio of massive resonance production to Z peak production is computed. At 95% confidence level, the production of SSM Z' and Z'_ψ bosons are excluded for masses below 0.96 and 0.73 TeV/c^2 respectively. The corresponding limits for Randall-Sundrum graviton production for couplings of 0.1 and 0.05 are 0.93 and 0.73 TeV/c^2 .

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