

Search for Displaced Supersymmetry in events with leptons with large impact parameters at CMS

Thursday 27 August 2015 16:50 (15 minutes)

A search for new long-lived particles decaying to leptons is presented using proton-proton collisions produced by the LHC at $\sqrt{s} = 8$ TeV. Data used for the analysis were collected by the CMS detector and correspond to an integrated luminosity of approximately 20 inverse femtobarns. Events are selected with an electron and a muon, with no requirement of a shared vertex, and with di-lepton pairs that share a vertex. The resulting distributions are consistent with the expected background from standard model processes, and are interpreted in a variety of displaced BSM models. Any new results on the LHC Run 2 dataset will be presented if available.

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Session Classification: Alternative Theories

Track Classification: Alternative Theories