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Search for new physics in events with two low momentum opposite-sign leptons and missing transverse energy at $\sqrt{s} = 13 \text{ TeV}$

Thursday 24 August 2017 18:00 (30 minutes)

A search for new physics in events with low-momentum, opposite-sign leptons and moderate missing transverse momentum, using 35.9 1/fb of integrated luminosity collected by the CMS experiment at \sqrt{s} = 13 TeV, is presented. The observed data is consistent with the expectation from the standard model. The results are interpreted in terms of pair production of charginos and neutralinos with nearly degenerate masses, as expected in natural compressed higgsino models, and in terms of the pair production of top squarks for the case that the neutralino and the top squark have similar masses. The mass region excluded was so far constrained only by LEP experiments. An interpretation is also provided in terms of top squark pair production processes with degenerate mass spectra and chargino-mediated decays.

Topic:

Topic: High Energy Particle Physics

Summary

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