

Abstract Submitted
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Search for chargino and slepton pair production using the $M_{CT\perp}$ variable NICHOLAS EGGERT, Cornell University, CMS COLLABORATION — We perform a search for chargino pair-production in 2012 LHC data at $\sqrt{s} = 8$ TeV with the CMS detector. We search for events with two leptons, missing energy, and no b-tagged jets. We then use the $M_{CT\perp}$ variable to discriminate against Standard Model backgrounds. Background is estimated using a shape fit to the distribution using data-driven and Monte Carlo template shapes. The data is well-described by the background-only fit, and we observe no evidence of new physics. We interpret these results in terms of limits on two simplified models, one modeling chargino pair-production and the other slepton pair-production.

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