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Search for Electroweak production of changino and neutralinos SANTIAGO FOLGUERAS, Universidad de Oviedo, CMS COLLABORATION COLLABORATION — We present the results of a search for electroweak production of charginos and neutralinos at CMS using a dataset collected in 2012. The search uses several final state signatures including multileptons, dileptons+dijets, and same-sign dileptons without significant jet activity as well as opposite-sign dileptons. Each of these final states are designed to either target different productions, chargino or neutralino pair or chargino-neutralino pair, or probe difficult regions of phase-space. For example, the same-sing dileptons can extend the sensitivity to chargino-neutralino pair production with subsequent decays to three leptons where one of the leptons is soft and cannot be detected. Such a scenario is likely to happen if the mass difference between the supersymmetric particles produced in the decay chain is small. The results are interpreted using simplified models of electroweak production of charginos and neutralinos.

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