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Search for electroweak production of charginos in final states with two tau leptons in pp collisions at \sqrt{s} = 8 TeV

A search for electroweak production of supersymmetric particles is performed with two tau leptons in the final state. These results are based on 18.1 to 19.6 fb-1 of proton- proton collisions at $\sqrt{s} = 8$ TeV, collected with the CMS detector at the CERN Large Hadron Collider. The observed events are found to be consistent with the standard model prediction. Upper limits are set on the masses of the lightest chargino and the lightest neutralino, assuming the third generation sleptons are the lightest sleptons and their masses are at a middle point between the chargino and the neutralino. In the context of simplified model spectra, charginos lighter than 417 GeV are excluded at 95% confidence level in the case of massless neutralino.

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