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**Search for weakly-produced supersymmetric particles in the multi-lepton and missing energy channel at the ATLAS experiment** ELIZABETH HINES, University of Pennsylvania, ATLAS COLLABORATION — With null results so far from all the searches for signatures from the high-rate strong production of supersymmetric particles, the search for rarer signatures from the electroweak production of gauginos could provide an accessible discovery mode at the 8 TeV LHC. This talk presents the latest results from the ATLAS experiment on pair production of charginos and neutralinos, which then decay to yield a multi-lepton final state with missing transverse energy. We interpret these results for a simplified model where the gauginos decay via sleptons, and for a simplified model where the gauginos decay via W and Z bosons. We also present the results of searches for these two decay chains in the context of phenomenological MSSM.

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