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Search for boosted Stealth SUSY with photons and jets using 13TeV LHC data. SAVVAS KYRIACOU, Rutgers Univ, CMS COLLABORATION — An analysis is designed and performed on proton-proton collision data collected by the CMS experiment at a center of mass energy of 13TeV, targeting the pair production of squarks with a final state composed of photons, jets and low missing transverse energy. This search, motivated by a number of models such as stealth supersymmetry, focuses on the boosted regime, where photons and gluons merge in multi-core jet configurations, investigating thus a previously unexplored region. Substructure variables such as N-subjettiness, are utilized to discriminate these structure rich jets against standard model background. The analysis development and results are presented.

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