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A search for SUSY with Razor kinematic variables in proton-proton collisions at $\sqrt{s}{=}8$ TeV with the ATLAS detector at the LHC ANTON KRAVCHENKO, Univ of South Carolina, ZACH MARSHALL, Lawrence Berkeley National Lab, LOUISE HEELAN, DANIEL BULLOCK, AMIR FARBIN, Univ of Texas at Arlington, MILIND PUROHIT, Univ of South Carolina, ATLAS COLLABORATION — The experimental signature for our search is jets and missing energy. The Razor variables are built using two mega-jets and are designed to discriminate against QCD multi-jets background. Contributions from dominant background sources (Z+jets, W+jets, $t\bar{t}$, and QCD) are estimated using control regions in data. The result is interpreted in the context of the simplified models of squark-pair production.

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