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## Search for SUSY with Same Sign Dilepton at ATLAS

A search for strongly produced supersymmetric particles is conducted using signatures involving multiple energetic jets and either two isolated leptons ( $e$  or  $\mu$ ) with the same electric charge, or at least three isolated leptons. The search also utilises jets originating from  $b$  quarks, missing transverse momentum and other observables to extend its sensitivity. The analysis uses a data sample corresponding to a total integrated luminosity of  $13.2 \text{ fb}^{-1}$  of  $\sqrt{s} = 13 \text{ TeV}$  proton-proton collisions recorded with the ATLAS detector at the Large Hadron Collider in 2015 and 2016. No significant excess over the Standard Model expectation is observed. The results are interpreted in several simplified supersymmetric models featuring R-parity conservation and R-parity violation, extending the exclusion limits from previous searches.

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