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## Search for gluinos and squarks in events with one isolated lepton, at least 2-9 jets and missing transverse momentum at $\sqrt{s} = 13$ TeV with the ATLAS detector

This poster presents the results of a search for gluinos and squarks in events with exactly one lepton in the final state in addition to multiple jets and large missing transverse momentum. The analysed ATLAS data from 2015 and 2016 corresponds to an integrated luminosity of  $36.1 \text{ fb}^{-1}$  at a centre-of-mass energy of 13 TeV. In addition to previous publications the latest results contain a multijet channel, requiring at least 9 jets. To estimate the background in this regime a data-driven technique, based on the invariance of the transverse mass shape in events with different jet multiplicities, was developed. No significant excess was observed. The results are interpreted in a simplified model for 2-step gluino decays and a subset of the phenomenological minimal supersymmetric standard model (pMSSM).

### Experimental Collaboration

ATLAS

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