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[367] Reconstruction improvements and model extensions of the ATLAS SUSY search in multijet plus missing transverse momentum final state.

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The Minimal Supersymmetric Standard Model (MSSM) is today one of the most credited theories for physics Beyond the Standard Model (BSM). However, despite its success in providing a solution to many cosmological and High Energy Physics (HEP) observations, MSSM particles are still elusive today at the Large Hadron Collider (LHC). In this context, the zero lepton SUSY Multijets analysis has a remarkable sensitivity to supersymmetric particles due to the large jet multiplicity and the low Missing Transverse Momentum (MET) characterising its signature. This talk will focus on the possible reconstruction improvements and model extensions of the ATLAS Multijets analysis in view of the results that will be released after the end of the full Run II LHC data taking.

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