

# QCD Issues in Searches for Supersymmetry with the ATLAS Detector

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Despite the absence of experimental evidence, weak-scale supersymmetry remains one of the best motivated and studied Standard Model extensions. Searches for weak-scale supersymmetry interact with QCD in many ways: QCD scaling rules are used in background estimation techniques; jet sub-structure is exploited for separating signal and background; signal cross sections rely on higher-order calculations and resummation. Additional complex QCD issues arise in searches for R-hadrons, hadrons that include long-lived SUSY particles. This talk summarizes recent ATLAS results on supersymmetry searches, focusing on those aspects that most strongly interact with QCD.

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