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## **[334] Searching for R-Parity Violating Supersymmetry with the ATLAS Detector**

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Despite its many successes, the Standard Model leaves some fundamental questions unanswered, such as the hierarchy problem or dark matter. An elegant solution is offered by supersymmetry, which extends the Standard Model by introducing new particles and their interactions. This talk introduces the concept of R-parity violating supersymmetry and describes the search for R-parity violating supersymmetry in an all-hadronic multi-jet final state using the full Run-2 dataset from the ATLAS detector. Challenges arising from the combinatorial problem of the final state and from the signal-like background in proton-proton collisions are discussed, and solutions derived by the analysis team are presented.

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