

# The supersymmetric landscape after Run 2 ATLAS searches

*Monday 7 April 2025 17:15 (15 minutes)*

The ATLAS Collaboration has performed a range of searches for supersymmetry (SUSY) which have produced null results and extensive limits on sparticle masses in simplified scenarios. However, many SUSY scenarios could have evaded detection through a richer phenomenology not captured by simplified models. I will present the constraints from Run 2 ATLAS searches for the electroweak production of supersymmetric particles, interpreted in the 19-parameter phenomenological MSSM [1]. I will also discuss the complementarity of these searches to additional constraints, such as limits from dark matter experiments. These results provide an overview of the electroweak SUSY landscape after the ATLAS Run 2 search programme and highlight places SUSY could yet be awaiting discovery in Run 3 data.

[1] ATLAS Collaboration, JHEP 2024 (2024) 106

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**Session Classification:** Beyond the Standard Model

**Track Classification:** Beyond the Standard Model