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Searching outside the box for supersymmetry: beyond the cut-and-count in ATLAS analyses

Friday, 31 July 2020 12:00 (15 minutes)

The apparent absence of superpartners at the LHC suggests that complex decays may be obscuring hints of their existence. To maximize sensitivity in the large datasets available from Run 2 of the LHC, searches for supersymmetric particles have adopted progressively more advanced analysis strategies. This presentation features several analyses that have been carried out by the ATLAS collaboration, which push the boundaries of signal sensitivity using machine learning techniques, multi-variate analyses and multi-channel statistical analyses. These searches achieve unprecedented sensitivity to the signatures of sparticle production, while providing useful constraints on a wider variety of Beyond-the-Standard-Model particles.

I read the instructions

Secondary track (number)

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