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Type: **Poster presentation**

Search for new physics in multi-body invariant masses in dijet events with an isolated lepton in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector

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A search for resonances in events with at least one isolated charged lepton (electron or muon) is performed using 139 fb^{-1} of $\sqrt{s}=13$ TeV proton-proton collision data recorded by the ATLAS detector at the LHC. Deviations from Standard Model predictions are tested in three- and four-body invariant mass distributions constructed from jets and leptons. The study reports first model-independent limits on generic resonances characterized by cascade decays of particles leading to multiple jets and leptons in the final state. Model-independent limits are calculated using Gaussian shapes with different widths. The multi-body invariant masses are then used to set upper limits at a 95% confidence level on various beyond the standard model physics scenarios.

Details

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Is this abstract from experiment?

Yes

Name of experiment and experimental site

ATLAS

Is the speaker for that presentation defined?

Yes

Internet talk

Maybe

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Session Classification: Poster Session