

# Miami Physics Conference 2022

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**Title:** Searches for heavy resonances in ATLAS

Many new physics models predict the existence of new, heavy particles. This talk summarizes recent ATLAS searches for Beyond-the-Standard-Model heavy resonances which decay to pairs of bosons, heavy quarks, or leptons, using Run 2 data collected at the LHC. The experimental methods are explained, including the jet substructure techniques used in some searches to disentangle the hadronic decay products in highly boosted configurations.