

## **Searches for boosted resonances (non-diboson) and semi-visible jets with the ATLAS detector**

*Wednesday, 31 July 2024 11:20 (20 minutes)*

Many new-physics signatures at the LHC produce highly boosted particles, leading to close-by objects in the detector and necessitating jet substructure techniques to disentangle the hadronic decay products. This talk will illustrate the use of these techniques in recent ATLAS searches for heavy  $W'$  and  $Z'$  resonances in top-bottom and di-top final states, as well as in searches for vector-like quarks or dark matter. Additionally, an analysis searching for semi-visible jets, with a significant contribution to missing transverse momentum, is presented. This type of topologies can arise in strongly-interacting dark sectors.

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