

## Searches for resonances decaying to pairs of heavy bosons in ATLAS

Many new physics models predict the existence of Higgs-like particles decaying into two bosons (W, Z, photon, or Higgs bosons) making these important signatures in the search for new physics. Searches for  $V\gamma$ ,  $VV$ , and  $VH$  resonances have been performed in various final states. In some of these searches, jet substructure techniques are used to disentangle the hadronic decay products in highly boosted configurations. This talk summarises recent ATLAS searches with Run 2 data collected at the LHC and explains the experimental methods used, including vector- and Higgs-boson-tagging techniques.

### Submitted on behalf of a Collaboration?

Yes

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