

Search for high mass resonances with boson-tagged jets with the ATLAS detector

Many extensions to the Standard Model predict new particles which couple to the electroweak bosons. Using recently developed jet substructure techniques it is possible to tag jets consistent with hadronically decaying bosons whilst rejecting the QCD background. Studying the all-hadronic final state with this strategy was used in run-1 to perform a search for new high mass resonances. This final state has significantly more statistics than its leptonic or semi-leptonic counterparts allowing the search to explore a higher mass range. This poster will present the techniques and results of the run-1 analysis and discuss the improvements and challenges expected for its run-2 counterpart.

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