

# Jet substructure tools for probing low-mass hadronic resonances at ATLAS

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Many extensions of the Standard Model predict resonances with significant couplings to quarks and gluons, including resonances which also couple to dark matter particles. Such hadronic resonances has been probed well into the TeV range at LHC. Therefore, focusing on the searches for low mass resonances is crucial for the completeness of the diet resonance searches. In order to suppress the large multijet background in the low mass region, jet substructure tools are carrying great importance. ATLAS uses several jet substructure techniques in order to improve the sensitivity of these searches. These techniques and their impact on these searches will be presented

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