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## Boosted Hadronically Decaying W/Z bosons in ATLAS

Tuesday, 9 April 2013 08:45 (12 minutes)

This talk will discuss the search for a boosted hadronically decaying W/Z boson reconstructed in a single jet using the ATLAS experiment at the LHC. The signal is identified using jet shapes calculated from the jet in its centre of mass frame and from this a cross section can be extracted. The peak is then used to investigate the effect of various jet grooming and substructure techniques, specifically pruning, trimming, area subtraction and splitting and filtering. The groomed jets are used both for the calculation of the shapes and the mass and the effect assessed in terms of pileup dependence, data-MC agreement and enhancement of the signal.

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