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# Performance and calibration for the identification of boosted Higgs bosons decaying into beauty quark pairs in ATLAS

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The physics programme at ATLAS involves a variety of Standard Model and Beyond Standard Model resonances decaying to two b quarks, including the Higgs Boson. In order to identify these resonances at high momentum, ATLAS has developed the boosted X⟶bb tagger, a new NN-based tagging algorithm which combines the flavour information of up to three sub-jets associated to the large-R jet capturing the decays of these particles. This talk presents the Monte Carlo performance for the boosted X⟶bb tagger and the corresponding calibration strategy using the full Run-2 dataset gathered by ATLAS and comparing to simulation. Foreseen results include the signal tagging efficiencies derived using Z (->bb)+jets and Z(->bb)+gamma events, and background mistag rates measured using ttbar and g->bb splitting in multi-jet events.

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