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# Lund Jet Plane based boosted taggers for the $Top$ quark and the $W$ boson

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This project, carried out within the ATLAS collaboration, focused on jet substructure studies using the Lund jet plane. Lund plane variables were implemented and used to train graph-based machine learning models for tagging hadronically decaying $W$ bosons and $top$ quarks. The performance of these taggers was systematically evaluated using different Monte Carlo event generators, with dedicated studies on the impact of kt-based cuts. These results contribute to understanding the robustness of jet tagging methods under variations in parton shower and hadronization modeling.

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