Contribution ID: **12**   Type: **not specified**

Flavour Tagging Studies in GN3 with the ATLAS Experiment

The identification of jets containing b-hadrons (b-jets) plays a crucial role in the physics program of the ATLAS experiment. This project will focus on improving and evaluating the next iteration of b-tagging algorithms, GN3, and using the FTAG tools currently used in ATLAS. The student will explore quark/gluon tagging with the GN3 tagger, assessing its performance and optimisation strategies. The project will also involve comparing overall GN3 performance with the previous flavour tagging algorithm (GN2) across various simulated event samples. This project provides an excellent opportunity for hands-on experience with machine learning training, data analysis, and detector physics.

Group

FH-ATLAS

Project Category

B1. Physics data analysis and performance (software-oriented)

Special Qualifications

Python, Basic particle-physics knowledge

DESY Site

Hamburg

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