Contribution ID: **205** Type: **Talk**

Jet flavour tagging for the ATLAS Experiment

Wednesday, 1 September 2021 12:15 (25 minutes)

The ability to identify jets stemming from the hadronisation of b-quarks (b-jets) is crucial for the physics program of ATLAS.
The higher pileup conditions and the growing interest for measurements including c-jets and for searches in the high transverse momentum regime make the task more and more complex. The algorithms responsible for establishing the jet's flavour are evolving quickly, exploiting powerful multivariate and deep machine learning techniques. Since the primary input to any such algorithm consists of charged-particle tracks within the jet, the identification of jets from heavy-flavor decays depends strongly on the tracking efficiency and resolution and the robustness of the track-jet association logic. Flavour-tagging techniques in ATLAS will be reviewed, presenting the state-of-the-art in terms of algorithms, with focus on the capability to reconstruct and select the relevant tracks produced in the ATLAS Inner Detector.

Is this abstract from experiment?

Yes

Name of experiment and experimental site

ATLAS

Is the speaker for that presentation defined?

Yes

Details

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Internet talk

Maybe

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