



Contribution ID: 58

Type: Oral

## Machine Learning Algorithms for b-jet tagging at the ATLAS experiment

*Tuesday 22 August 2017 14:45 (25 minutes)*

The separation of b-quark initiated jets from those coming from lighter quark flavours (b-tagging) is a fundamental tool for the ATLAS physics program at the CERN Large Hadron Collider. The most powerful b-tagging algorithms combine information from low-level taggers exploiting reconstructed track and vertex information using a multivariate classifier. The potential of modern Machine Learning techniques such as Recurrent Neural Networks and Deep Learning is explored using simulated events, and compared to that achievable from more traditional classifiers such as boosted decision trees.

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**Session Classification:** Track 2: Data Analysis - Algorithms and Tools

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