

Contribution ID: 23 Type: not specified

## Studies to mitigate difference between real data and simulation for jet tagging

Tuesday, 10 April 2018 17:20 (20 minutes)

The aim of the studies presented is to improve the performance of jet flavour tagging on real data while still exploiting a simulated dataset for the learning of the main classification task. In the presentation we explore "off the shelf" domain adaptation techniques as well as customised additions to them. The latter improves the calibration of the tagger, potentially leading to smaller systematic uncertainties. The studies are performed with simplified simulations for the case of b-jet tagging. The presentation will include first results as well as discuss pitfalls that we discovered during our research.

## **Intended contribution length**

20 minutes

**Primary authors:** STOYE, Markus (CERN); VERZETTI, Mauro (CERN); KIESELER, Jan (CERN); MARTELLI, Arabella (Imperial College (GB)); BUCHMULLER, Oliver (Imperial College (GB))

**Presenters:** STOYE, Markus (CERN); VERZETTI, Mauro (CERN); KIESELER, Jan (CERN); MARTELLI, Arabella (Imperial College (GB)); BUCHMULLER, Oliver (Imperial College (GB))

**Session Classification:** Session 4