



Contribution ID: 7

Type: **not specified**

Inclusive tagging of B-flavour at LHCb [Vidyo]

Tuesday, March 21, 2017 11:55 AM (20 minutes)

One of the most important procedure needed for the study of CP violation in Beauty sector is the tagging of the flavour of neutral B-mesons at production. The harsh environment of the Large Hadron Collider makes it particularly hard to succeed in this task. We present a proposal to upgrade current flavour tagging strategy in LHCb experiment. This strategy consists of inclusive tagging ensemble methods (i.e. the use inclusive information about the event without a firm selection rule), which are combined using a probabilistic model for each event. The probabilistic model uses all reconstructed tracks and secondary vertices to obtain well-determined probability of B flavour at production. Such approach reduces the dependence on the performance of lower level identification capacities and thus has the potential to increase the overall performance.

Presenter: ROGOZHNIKOV, Aleksei (Yandex School of Data Analysis (RU))

Session Classification: Identification and Tagging Mini-Workshop