20th International Conference on Computing in High Energy and Nuclear Physics (CHEP2013)



Contribution ID: 366

Type: Poster presentation

Real-time flavor tagging selection in ATLAS

Monday 14 October 2013 15:00 (45 minutes)

In high--energy physics experiments, online selection is crucial to reject most uninteresting collisions and to focus on interesting physical signals.

The b--jet selection is part of the trigger strategy of the ATLAS experiment and is meant to select hadronic final states with heavy--flavor content. This is important for the selection of physics channels with more than one b--jet in the final state, enabling to reject QCD light jets and maintain affordable trigger rates without raising jet energy thresholds. ATLAS introduced b--jet triggers in 2011 and deployed more complex and better performing tagging algorithms in 2012. An overview of the b--jet trigger menu and its performance on real data is presented in this contribution.

Data--driven techniques to extract the online b--tagging performance, a key ingredient for all analyses relying on such triggers, are also discussed and results presented.

Author: Mr SCHIAVI, Carlo (INFN Genova)

Presenter: BUZATU, Adrian (University of Glasgow (GB))

Session Classification: Poster presentations

Track Classification: Data acquisition, trigger and controls