

Muon Identification and Performance in the ATLAS Experiment

Friday 31 July 2020 08:00 (15 minutes)

Muon reconstruction and identification play a fundamental role in many analyses of central importance in the LHC run-2 Physics programme. The algorithms and the criteria used in ATLAS for the reconstruction and identification of muons with transverse momentum from a few GeV to the TeV scale will be presented. Their performance is measured in data based on the decays of Z and J/ψ to pair of muons, that provide a large statistics calibration sample. Reconstruction and identification efficiencies are evaluated, and the results are used to derive precise MC simulation corrections. Isolation selection criteria and their performance in presence of high pileup will also be presented.

I read the instructions

Secondary track (number)

Author: OSPANOV, Rustem (University of Science and Technology of China)

Presenter: OSPANOV, Rustem (University of Science and Technology of China)

Session Classification: Operation, Performance and Upgrade of Present Detectors

Track Classification: 12. Operation, Performance and Upgrade of Present Detectors