

Abstract Submitted  
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**Reconstruction and identification of hadronic tau-decays in ATLAS** ADAM CUNHA, Brookhaven National Laboratory — The identification of tau-jet from the hadronic tau-decay is crucial for the study of many physics channels like the production of Higgs bosons decaying to taus or SUSY. The tau-jet reconstruction in ATLAS is performed starting from the energy deposited in calorimeters or also combining measure from calorimeter and tracking with energy-flow technique. Quantities built both from the calorimeters and from the inner detector are used to identify tau-jets against other jets. In the talk we will review the performance of tau-jet reconstruction and identification, showing that the excellent tau-efficiency vs the jet-rejection obtained in ATLAS will allow the study of channels where the background from jets is potentially very large.

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