

Abstract Submitted
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Performance of b jet identification pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector WASIKUL ISLAM, Oklahoma State University, ATLAS COLLABORATION — The efficient identification of jets from bottom quarks (b-jets) is one of the most important techniques for many physics analyses at the Large Hadron Collider, including studies of the Higgs boson, the top quark, and searches beyond the Standard Model. The performance is characterized by b-tagging efficiency (probability to identify a b-jet as such) and the mistag rate (probability to mistakenly accept a non-b-jet). Mistags occur as a result of finite detector resolution, presence of long-lived particles, and material interactions. As these effects can be different between the experimental data and simulation, it is important to measure the b-tagging performance in data and derive the correction factors for the simulation. I will describe various methods to measure the performance of b jet identification in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector.

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