

Abstract Submitted
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ATLAS Muon Identification and Reconstruction Performance in 2016 LAURA BERGSTEN, Brandeis University, ATLAS COLLABORATION — This talk aims to describe the ATLAS muon identification and reconstruction performance in 2016. Reconstruction and isolation efficiencies as well as the transverse momentum scale and transverse momentum resolution are measured from LHC proton-proton collision data recorded by ATLAS in 2016 at a center-of-mass-energy of 13 TeV. The measurements are performed by studying the abundantly produced and well known J/Ψ and Z -boson resonances decaying into two oppositely-charged muons. Muon momenta ranging from 5 to a few hundred GeV and covering the pseudo-rapidity range $|\eta| < 2.5$ are found to be in good agreement with tuned detector simulations. Furthermore, the performance of the detector for data collected in 2016 is compared to the performance for data collected during 2015.

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