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Measurements of Jets and Jet Properties with the ATLAS Detector AARON ANGERAMI[1], Columbia University — The energy loss of high-p_{T} partons through the phenomenon of jet quenching provides insight into the transport properties of the medium created in relativistic heavy ion collisions. Evidence for this energy loss was first experimentally established through observation of high-pt hadron suppression at RHIC. This observable is not ideal for detailed quenching measurements as the final state hadrons are only relatable to the jet through the fragmentation. More recently, measurements of fully reconstructed jets have been performed at the LHC. This talk presents the latest experimental results from the ATLAS collaboration on jets including jet suppression, dijet asymmetry and measurements of jet properties such as the fragmentation function. These results establish qualitative features of the jet quenching mechanism as experimental fact and provide constraints on models of jet energy loss.

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