

Abstract Submitted
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Jet production in pp, pA and AA collisions ROSI REED, Wayne State University — Particle jets, formed when a hard scattered parton fragments into a “jet” of hadrons, are an ideal probe of the medium formed in heavy-ion collisions. At LHC energies, the larger parton production cross-section compared to RHIC, allowed jets to be reconstructed over a much wider kinematic range. As the cross-section for the underlying soft-background did not increase at the same rate, this allowed a multitude of jet reconstruction techniques to be developed. In this talk, jet spectra from 2.76 TeV Pb-Pb and pp collisions will be presented, along with the techniques required to remove the underlying event in heavy ion collisions. In particular, the centrality and event-plane dependence of the measured spectra and the background will be discussed. The reconstruction and correction procedures for jets will be shown. Results from Pb-Pb events will be compared to the baseline pp and p-Pb results, which allow the effect of the initial state and cold nuclear matter effects to be disentangled from hot medium effects. A comparison of the jet nuclear modification factor from both the LHC and RHIC will be made.

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