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A simultaneous description of jet suppression and hadron suppression

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Recent measurements of hadron and jet RAA at very high energies provide in combination crucial new input to our understanding of jet quenching. The increased precision of these observables has shown how hadrons and jets with comparable energies are suppressed differently. This is natural, since triggering on a high energy hadron constitutes selecting an unusual jet whose fragmentation pattern is unusually hard and unusually narrow in angle. By using the hybrid strong/weak coupling model including finite resolution, we study the various different physical effects that contribute to the observed results in data, and provide a simultaneous description of jet and hadron RAA data across the full kinematic range available in heavy ion collisions at the LHC. We also compare to hadron data from RHIC.

Content type

Theory

Collaboration

Centralised submission by Collaboration

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