

High p_T Identified Particle Spectra : Jet Fragmentation and Color Charge Dependence of Energy Loss

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I will present an overview of identified particle spectra at high p_T ($p_T > \sim 5$ GeV/ c) in both $p+p$ collisions and AA collisions at RHIC. In $p+p$ collisions, summary of particle ratios of K, η , ω , ρ , ϕ , p, \bar{p} , Λ and heavy-flavor (open charm, J/ Ψ) to pion at high-pt will be compiled and compared to the ratios of integrated yields. The spectra are used in x_t scaling study and compared to pQCD calculations. These will help us establish particle composition in jets and the quark and gluon contributions to hadron production at high p_T . Similar jet chemistry has been extracted in Au+Au data in search for a quantitative measure of color charge dependence of jet energy loss.