Forward Physics in Proton-Nucleus and Nucleus-Nucleus Collisions

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We study a strong nuclear suppression at large pT for different processes at large forward rapidities (large Feynman xF), y. Such a common feature of any reaction, a + b --> c + X (c = h, \bar II, charmonium, ...) at large y can be viewed, alternatively, as a consequence of a reduced survival probability for large rapidity gap processes in nuclei, a Sudakov suppression, an enhanced resolution of higher Fock states by nuclei, or an effective energy loss that rises linearly with energy. Using color dipole approach we calculate nuclear suppression at large pT for several processes in a good agreement with available data. We predict an approximate exp(y)/sqrt(s)- scaling, i.e. a similar suppression at different energies and rapidities corresponding to the same value of xa (xF). It allows then to predict and interpret suppression effects at large pT also at midrapidities where the most of data at RHIC are obtained.