Contribution ID: **10** Type: **Talk**

Mini-Jet Absorption and its Consequences in Color String Models

Wednesday 4 December 2013 10:15 (19 minutes)

It is well known that jets or mini-jets in heavy ion and to a degree in dense proton reactions are suppressed as a consequence of re-scattering. Here we consider indirect consequences of such re-scattering. It is done in a toy model with a fixed survival length and a uniform emission density, adjusted to fit observed suppression of jets. In transverse direction the simple picture provides a novel component of a central aspect of azimuthal correlations. The angular flow v_{2} is obtained from the directional dependence of geometrically relevant surface size without added dynamical assumptions. In longitudinal direction the rather long range ridge structure of particles accompanying jets reflects the string structure. It relies on a usually assumed tight relation between space and momentum coordinates within one string and considers the spatial configuration of a hard scattered parton reaching a distant string. The resulting offset between the initial hard scattering and the re-scattering introduces a rapidity shift of the right magnitude for the debris visible as ridge.

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Session Classification: MPI & Monte Carlo

Track Classification: MPI & Monte Carlo