6th International Conference on New Frontiers in Physics (ICNFP2017)



Contribution ID: 1010

Type: Talk

Initial state correlations in the CGC wave function

Friday 25 August 2017 14:30 (30 minutes)

Origin of particle correlations in pA and pp collisions will be discussed from the initial state point of view. The light cone wave function of a fast hadron

has built-in QCD-induced intrinsic correlations among its Fock components. These correlations get imprinted as correlated flows of particles produced in a collision. As an example, Bose enhancement of gluons in the wave functions leads to a ridge-like correlation in two-particle inclusive cross section. I will present most recent developments of these ideas, which include short-range correlations induced by Pauli blocking of quarks in the wave function, the origin of odd harmonics (v_3), etc.

Topic:

Mini-workshop: Correlations and Fluctuations in Relativistic Heavy Ion Collisions

Summary

Primary author: LUBLINSKY, Michael

Co-authors: KOVNER, Alexander (University of Connecticut); ARMESTO PEREZ, Nestor (Universidade de Santiago de Compostela (ES)); ALTINOLUK, Tolga; SKOKOV, Vladimir (Brookhaven national laboratory)

Presenter: LUBLINSKY, Michael

Session Classification: Parallel session