

Contribution ID: 11 Type: not specified

## Studying minijets and MPI with rapidity correlations

Tuesday 11 December 2018 09:20 (20 minutes)

We propose and carry a detailed study of an observable sensitive to different mechanisms of minijet production. The class of observables measures how the transverse momenta of hadrons produced in association with various trigger objects are balanced as a function of rapidity. It is shown that the observables are sensitive to the model parameters relevant for the minijet production mechanisms: low- $p_{\rm T}$  cut-off regulating jet cross-section, transverse distribution of partons in protons, and parton distribution functions. We perform our test at different charge-particle multiplicities and collision energies. The MC models, which describe many features of the LHC data, are found to predict quite different results demonstrating high discriminating power of the proposed observables.

The talk will be based on: arXiv:1806.09016

**Authors:** AZARKIN, Maxim (Russian Academy of Sciences (RU)); KOTKO, Piotr (Penn State University); SIODMOK, Andrzej Konrad (Polish Academy of Sciences (PL)); STRIKMAN, Mark (Penn State University)

Presenter: STRIKMAN, Mark (Penn State University)

Session Classification: WG4