



Contribution ID: 566

Type: Oral Presentation

Drell-Yan Lepton-Pair-Jet Correlation in pA collisions

Friday, 17 August 2012 14:40 (20 minutes)

We have recently performed a numerical study of the forward correlations between the lepton-pair and associated hadrons in Drell-Yan process in pA collisions. Using the present knowledge of the dipole gluon distribution from the modified Golec-Biernat-Wusthoff model and from the solution of the Balitsky-Kovchegov evolution equation, we are able to compute and predict the forward correlations between the lepton-pair and associated hadron in Drell-Yan process at RHIC and LHC. Similar to the forward dihadron correlation in dAu collisions measured at RHIC, the Drell-Yan type correlation also implies a strong suppression of the away side hadron at forward rapidity due to the strong interaction between the forward quark from the projectile proton and the gluon density from the target nucleus. Another feature of this process is that the correlation contains a double-peak structure in the away side, which makes it a unique observable.

Primary authors: STASTO, Anna (Penn State); XIAO, Bowen (P); ZASLAVSKY, David (Penn State University)

Presenter: ZASLAVSKY, David (Penn State University)

Session Classification: Parallel 6E: Initial State and p-A (Chair E. Wang)