



Contribution ID: 19

Type: **parallel**

Application of a event generator version of DHJ formula to forward hadron spectra

Thursday, 7 August 2014 14:00 (20 minutes)

Models based on the Color Glass Condensate (CGC) framework have been successful in explaining many experimental data from RHIC and LHC.

However, applicability of these models are limited to a high transverse momentum region or one relies on the assumption of hadron-parton duality to compute multiplicity of the produced hadrons, because there are always non-perturbative effects in the process of hadronic interactions.

In this talk, we will present a newly developed Monte-Carlo event generator based on the CGC which is combined with Lund string fragmentation model.

We will show the comparison of our results to the forward hadron spectra at RHIC and LHCf, and discuss mechanism of the particle production.

Primary author: Prof. NARA, Yasushi (Akita International University)

Co-authors: FUJII, Hirotsugu (University of Tokyo); ITAKURA, Kazunori (KEK); Dr DENG, Wei-Tian (Huazhong University of Science and Technology (HUST))

Presenter: Prof. NARA, Yasushi (Akita International University)

Session Classification: Initial state physics