



Contribution ID: 132

Type: Oral presentation

Study of Transverse momentum distribution in the p-Pb collisions at LHC energies

Tuesday, 10 July 2018 11:30 (30 minutes)

We have studied p_T distributions of the invariant inclusive cross sections for the primary charged particles produced in p-Pb collisions at LHC energies with p_T in the interval of: 0.5 - 20 GeV/c using HIJING and UrQMD models. We observed that both ALICE Experimental data could not be described properly by HIJING and UrQMD models, But for the particles with $p_T > 5$ GeV/c and in the pseudorapidity regions of $|\eta| < 0.3$, $0.3 < \eta < 0.8$ the model predictions are very close to the experimental results. The predictions of the models are η dependent while for the experiment there is no essential difference of yields for particles from the central and forward pseudorapidity intervals. The codes cannot take into account leading effect satisfactorily due to the asymmetric p-Pb fragmentation. We observed that at high p_T (0.5 - 100 GeV/c) values the behavior of the distributions show some universality which do not depend upon the model ideas. The reason of the universality could be the string dynamics for the parton hadronization at high p_T values.

Primary authors: ALI, Yasir (COMSATS Institute of Information Technology (PK)); TABASSAM, Uzma (COMSATS Institute of Information Technology (PK))

Presenter: ALI, Yasir (COMSATS Institute of Information Technology (PK))

Session Classification: Parallel Section B Heavy Ion