Production of one and two $c\bar{c}$ pairs at LHC

Thursday, 13 September 2012 10:10 (20 minutes)

Summary

We discuss charm production at LHC. The production of single $c\bar{c}$ pairs is calculated in the k_t -factorization approach. We use several unintegrated gluon distributions from the literature. Some of them include effect of small-x staturation and fullfil Balitsky-Kovchegov evolution equation. The hadronization is included with the help of fragmentation functions found for the production of c (\bar{c}) in e^+e^- collisions. Differential distributions for several charmed mesons will be presented and compared to recent results of the ALICE and LHCb collaborations. Some missing strength is identified. Different schemes of fragmentation are discussed. (...)

Primary author: Prof. SZCZUREK, Antoni (Institute of Nuclear Physics PAN)

Presenter: Prof. SZCZUREK, Antoni (Institute of Nuclear Physics PAN)

Session Classification: Progress in QCD (I)

Track Classification: Progress in QCD