

Hadron Productions at LHC Energies with HIJING2.0 Model

We updated the HIJING Monte Carlo model with the latest parton distribution functions and new set of the parameters in the two-component-model that controls total p+p cross section and the central pseudorapidity density. We study hadron spectra and multiplicity distributions using the HIJING 2.0 model and compare to recent experimental data from p + p collisions at the LHC energies. Using a strong gluon shadowing effect, we can also give the prediction about hadron production in p+Pb and Pb+Pb collisions at LHC energies. The recent published LHC experiment results are in good agreement with our predictions within the experimental errors and theoretical uncertainties, including the central rapidity multiplicity and its centrality dependency in Pb+Pb collisions.

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