

Interplay between hard and soft physics in PbPb collisions at the LHC

The started LHC heavy ion program makes it possible to probe new frontiers of the high temperature Quantum Chromodynamics. The first LHC data on multiplicity, hadron spectra, elliptic flow and femtoscopic correlations from PbPb collisions at center-of-mass energy 2.76 TeV per nucleon pair are analyzed in the framework of the HYDJET++ model which describes relativistic heavy ion collisions as a superposition of the soft, hydro-type state and the hard state resulting from multi-parton fragmentation. The key influence of the jet production mechanism on the physics observables is discussed.

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