

Multiplicity dependence of light flavour hadron production at LHC energies in the strangeness canonical suppression picture

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The recently observed phenomenon of enhanced strange particle production in high multiplicity pp collisions at LHC is not yet well understood from a theoretical point of view. While a modelling based on QCD inspired MC models such as PYTHIA, DIPSY or EPOS aims at a microscopic understanding, we present two alternative approaches to study light flavour hadron production as a function of event multiplicity using macroscopic thermal-statistical and Core-Corona models. The strangeness-canonical approach embedded in THERMUS is used for the simultaneous description of hadron-to-pion yield ratios in pp, p-Pb and Pb-Pb collisions and compared to predictions from Core-Corona. The rapidity window dependence of the strangeness correlation volume is addressed and a very good agreement between the data and the models except for the phi-meson is observed.

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