

# Scaling properties of charged particle multiplicity fluctuations in transport model

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QCD predicts significant fluctuations being associated with quark-hadron phase transition. Studying system that emerges in the relativistic heavy ion collisions, important information on the evolution of the quark-hadron phase transition can be extracted. Local multiplicity fluctuations of hadrons produced in these collisions may reveal some of the features of the phase transition. A fundamental characteristic of the critical behaviour of a system under-going phase transition is that it exhibits fluctuations of all scales. Scaling properties of the factorial moments of produced particles, more commonly known as intermittency, are used to quantify these fluctuations in a system. We will present observations on the multiplicity fluctuations of the charged particles, generated in the Pb-Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV using A MultiPhase Transport model. Scaling of the factorial moments with the number of bins will be discussed.

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