

Abstract Submitted  
for the DNP12 Meeting of  
The American Physical Society

**Energy Dependence of the High Moments from Transport Model Simulations** NU XU, CCNU and LBNL, XIAOFENG LUO, CCNU, BEDAN-GADAS MOHANTY, NISER — One of the most exciting goals for the field of high-energy nuclear collisions is to understand the phase structure of matter with partonic degrees of freedom especially the transition from hadronic to partonic matter, the quark-gluon plasma (QGP). In high-energy nuclear collisions at RHIC, the new form of matter, strongly interacting quark-gluon plasma (sQGP) has been formed. The question now is what is the structure of the QCD phase diagram in the region where the baryonic chemical potential is large. In this talk, we will report a systematic study of high-moments for net-charge, net-baryon and net-proton as a function of collision energies. These studies were performed with the AMPT and UrQMD models and the results will be compared with available experimental data. The main goal for this study is to prepare the reference where no dynamical effects, caused by either phase transition or QCD critical point, are expected. This is a necessary study for understanding the experimental results from the Beam Energy Scan program at RHIC. In addition, the study will also help us to understand the experimental effects such as charge conservations, acceptance and so on.

Nu Xu  
CCNU and LBNL

Date submitted: 02 Jul 2012

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