

Signature of phase transition in finite strongly interacting matter

Phase structure of QCD is interesting in its own and existence of a possible Critical End Point (CEP) in QCD phase diagram is under active investigation, both in theoretical and experimental fronts. The system created in heavy ion collisions has a finite size and motivates us to work on possible finite size effects on QCD phase transition on the theoretical side. In this work, we have used a QCD inspired effective model, namely Polyakov loop extended version of Nambu-Jona-Lasinio model. Finite size effects are incorporated using Multiple Reflection Expansion formalism. We investigate the finite size effects on the fluctuation of conserved charges and its possible implication on CEP search.

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