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# Nucleation rate of Quark-Gluon-Plasma at small finite chemical potential

Content :

Quark Gluon Plasma (QGP) nucleation rate from the hadronic matter is computed. In the course of computing nucleation rate the effect of curvature and surface tension has been incorporated under a finite chemical potential. Also a comparative study of the nucleation rate with curvature and without curvature is shown. The result indicates that for a finite QGP system curvature is an important factor. We have found that the effect of curvature enhances the critical free energy required to form QGP droplet in the hadronic medium and thus suppression of the nucleation rate takes place.

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