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Effect of Chemical Potential on the Early Universe Expansion of Quark Gluon Plasma

Monday 12 September 2022 17:30 (7 minutes)

In this study, we investigate the effects of introducing a chemical potential in the expansion of early universe Quark Gluon Plasma (QGP). We use a quasi-particle approach in which we consider a temperature dependent quark-mass. We then proceed to solve the Friedman equation to obtain the equation of state of energy density and temperature, the graphs of which are shown in the results section. The study of the change of energy density and temperature of QGP with time is important to understand its evolution in the early stages of universe, which is useful for studies in cosmology and high energy astrophysics

Is this abstract from experiment?

No

Name of experiment and experimental site

N/A

Is the speaker for that presentation defined?

Yes

Details

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Internet talk

Yes

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