DILEPTON PRODUCTION IN TEMPERATURE DEPENDENTBARYONIC QUARK-GLUON PLASMA

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The fireball of QGP is evoluted at finite temperature and temperature dependent quark chemical potential by a statistical model in the pionic medium. We study the dilepton production at these finite temperature and temperature dependent quark chemical potential from such a fireball of QGP. In this model , we introduce the dynamical quark mass as dependence on coupling value and temperature. The production rate from the plasma shows a specific structure of dilepton spectrum in the mass region of $(0-4.0)\ GeV$ and its production rate is observed to be a strong increasing function of the temperature dependent chemical potential for quark and antiquark annihilation. The result agrees with the production rate of the other works in the dilepton production.

References

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