

Kaon production in an effective relativistic mean field model

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We investigate the kaons production at finite temperature and baryon density by means of an effective relativistic mean-field model with the inclusion of the full octet of baryons [1]. Kaons are considered taking into account of an effective mass and chemical potential depending on the self-consistent interaction between baryons. The obtained results are compared with a minimal coupling scheme, calculated for different values of the anti-kaon optical potential. In this context, we also consider the possible onset of the kaon condensation for a wide range of temperatures and baryon densities.

[1] A. Lavagno, Phys. Rev. C 81 (2010) 044909

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