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Dynamic Mass of Hadrons in Three Flavour Nambu-Jona Lasinio Model

It is beyond any doubt that quantum chromodynamics (QCD) is the theory of strong interactions. While its perturbative aspects have been studied, its non-perturbative aspects are not so well explored. This non perturbative domain is called QCD vacuum and is studied by effective field models. One such model to study QCD Vacuum regime is NJL model. Using NJL model we will obtain QCD vacuum hadron masses and see how masses are impacted with increasing temperature both at vanishing baryon chemical potential ($\mu = 0$) and non vanishing baryon chemical potential ($\mu \neq 0$).

Field of contribution

Phenomenology

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