

The phase-diagram of the NJL model

Thursday, 17 December 2020 15:50 (0:25)

Content

With the arrival of a new generation of experiments that will allow us to probe QCD at densities and temperatures closer to the CEP, it is more important than ever to extract insights from the complex theory of QCD. Given this complexity, physicist has resorted to diverse direct and indirect methods to extract predictions from the theory, among those methods are: pQCD for high energy interactions, LatticeQCD, effective models among others. In this talk we will make use of the Nambu-Jona-Lasinio (NJL) model of quarks to draw the effective phase-diagram of QCD making use of a novel method that employs Lagrange Multipliers. This finally results in conditions from which we can extract the information of the different phases of the diagram.

Area of contribution

Theory and Phenomenology

Primary author(s) : Mr. ANGELO, Martínez (Instituto de Física y Matemáticas, UMSNH); Dr. RAYA, Alfredo (IFM-UMSNH)

Presenter(s) : Mr. MARTÍNEZ, Angelo (Instituto de Física y Matemáticas, UMSNH)

Session Classification : Theory and Phenomenology