Iranian Journal of Physics Research, Vol. 20, No. 4, 2021
DOI: 10.47176/ijpr.20.4.37311

Warm intermediate and logamediate cosmic inflation with a constant dissipation coefficient in loop quantum gravity

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(Received 22 March 2019 ; in final form 21 October 2020)

Abstract

Warm inflationary model is investigated in the context of loop quantum cosmology. To this aim, we consider two cases including intermediate inflation and logamediate inflation. In both cases, assuming a constant dissipation coefficient, we study the model under consideration in the weak dissipation regime and also, in the strong dissipation regime. In each of these cases, we obtain various parameters such as potential function of inflationary scalar field and slow-roll parameters. Perturbation theory and also the relations between perturbative parameters are studied.

Keywords: warm inflation, intermediate, logamediate, loop quantum cosmology, perturbation

For full article, refer to the Persian section