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Warm Inflation with Barrow Holographic Dark Energy

In this work, we study the warm inflation mechanism in the presence of the Barrow holographic dark energy model. Warm inflation differs from other forms of inflation primarily in that it makes the assumption that radiation and inflaton exist and interact throughout the inflationary process. After the warming process, energy moves from the inflaton to the radiation as a result of the interaction, keeping the cosmos warm. Here we have set up the warm inflationary mechanism using Barrow holographic dark energy as the driving agent. Warm inflation has been explored in a high dissipative regime and interesting results have been obtained. It is seen that the Barrow holographic dark energy can successfully drive a warm inflationary scenario in the early universe. Finally, the model has been compared with the observational data and compliance has been found.

Track type

Cosmology

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