

Entropy evolution in Λ CDM cosmological models

The second Law of Thermodynamics is an important approach to testing models and theories. If a model is not consistent with a constant or increasing entropy to achieve thermodynamic equilibrium must be discarded. Therefore, the study of Entropy suggests that it is possible to validate models or not. In this work, an approach is developed in light of the Second Law of Thermodynamics for Cold Dark Matter (Λ CDM) models in a context of the De Sitter Universe ages that allows us to test the thermodynamic consistency of Λ CDM models from the study of $S' > 0$ and $S'' < 0$, suggesting limits of the parameters that these models have.

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