

Developed Chaplygin Gas Equation of State and its Relation to the String Theory

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Abstract

In this paper, we review several kinds of Chaplygin gases as a model for dark energy and introduce the developed Chaplygin gas which is a unification of all previous models. Dark energy is considered as a fluid of the many-body system with the specific equation of state. We show, as the main goal of this paper, that the developed Chaplygin gas equation of state can be obtained from the string theory like the ordinary Chaplygin gas equation of state.

Keywords: equation of state, dark energy, string theory, Chaplygin gas

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