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Ghost dark energy model in the presence of a linear, sign-changeable interaction

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Abstract

In the present study,we consider the generalized ghost dark energy in the presence of a sign changeable interaction term capable of explaining the recent acceleration of the universe. We obtain different evolving parameters and plot them. We find a good agreement between the model and observations. The plots reveal that with decreasing *b*, the universe enters the acceleration phase earlier, while decreasing ξ leads a delay in the entrance to the acceleration phase. Next,we present a squared sound speed analysis and find that with increasing b, the model can achieve the positive domain for squared sound speed, showing the signs of stability. Finally, we discuss the *statefinder* analysis, showing that the model can catch $\{r=1, s=0\}$ at the late time.

Keywords: cosmology, dark energy, interacting ghost dark energy, stability

For full article, refer to the Persian section