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Presentation

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Non-minimal scalar field coupling to gravity with holographic effect in non flat universe

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We investigate scalar field minimally coupled to gravity in the framework of holographic dark energy with apparent horizon cutoff in non flat universe. Dynamics of the model are studied by rewriting the Friedmann equation which modified by holographic effect in the form of autonomous differential equations system. In the model, we consider in pure kinetic ($V(\phi) = 0$), power law potential ($V(\phi) = V_0\phi^2$), and exponential one ($V(\phi) = V_0e^{-\alpha\phi}$). We obtain fixed points and also analyze the nature and their stability of each fixed points. We found that de Sitter attractor solutions which corresponds to the dark energy era are obtained in the case of non minimal coupling scalar field with powerlaw and exponential potentials in flat universe.

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