

Effect of Scale Factor in Anisotropic Feature of Cosmological Models

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Abstract

In this paper, the cosmological models of the universe are constructed in $f(R, T)$ gravity with choice of the functional $f(R, T)$ in the form $f_1(R) = \lambda R$ and $f_1(T) = \lambda T$ and also comparing with $f_2(R) = R$ and $f_2(T) = 2\lambda T$. The space-time considered here is Bianchi Type I and the energy-momentum tensor is in the form of perfect fluid. Various cosmological models are presented by using a general form of scale factor and a hyperbolic form. The energy conditions along with the state finder diagnostic pair and deceleration parameter have been obtained.