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Existence of bulk viscous universe in $f(R,T)$ gravity and confrontation with observational data

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In this paper we have investigated a bulk viscous universe in $f(R,T)$ gravity where R and T are the Ricci scalar and trace of energy momentum tensor respectively. We have obtained explicit solutions of field equations in modified gravity by considering the power law form of scale factor. The Hubble parameter and deceleration
parameter are derived in terms of cosmic time and redshift both. We have estimated the present values of these parameters with observational Hubble data and SN Ia data sets. At 1σ level, the estimated values of q_0 and m are obtained as $q_0 = -0.30 \pm 0.05$ \& $m = 0.70 \pm 0.02$ where q_0 is the present value of deceleration parameter and m is the model parameter. The energy conditions and Om(z) analysis for the anisotropic LRS Bianchi type I model are also discussed.

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