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Cosmological model in f(R,G,T) gravity

We study an FLRW cosmological model in f(R, G, T) gravity by assuming a specific form of the deceleration parameter. A Markov Chain Monte Carlo (MCMC) analysis is performed using the Cosmic Chronometer and Pantheon datasets to determine the parameters of the model. A viable model is obtained which exhibits a transition from deceleration to acceleration and which satisfies observational constraints. The various cosmographic parameters such as the deceleration, jerk and statefinder parameters are analysed and illustrated. A comparison is made with the standard Λ CDM model. Finally the energy conditions and equation of state are discussed. By studying this model, we get further knowledge and understanding of the dynamics and evolution of the cosmos.

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