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Late time cosmic acceleration in f(Q,T) gravity

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The dynamical aspects of some accelerating models are investigated in the framework of an extension of symmetric teleparallel gravity dubbed as f(Q, T) gravity. In this gravity theory, the usual Ricci tensor in the geometrical action is replaced by a functional f(Q, T) where Q is the non-metricity and T is the trace of the energy-momentum tensor. Two different functional forms are considered in the present work. In order to model the Universe, we have considered a signature flipping deceleration parameter simulated by a hybrid scale factor (HSF). The dynamical parameters of the model are derived and analyzed. We discuss the role of the parameter space in getting viable cosmological models. It is found that, the models may be useful as suitable geometrical alternatives to the usual dark energy approach.

Author: MISHRA, Bivudutta (BITS-Pilani, Hyderabad Campus)

Presenter: MISHRA, Bivudutta (BITS-Pilani, Hyderabad Campus)