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## **Cosmological bounce in a modified gravity framework**

In the present study, we have considered a scale factor corresponding to the bouncing universe. For this scale factor, we have demonstrated the reconstructed  $f(T)$  gravity in presence of bulk viscosity. The bulk viscosity coefficient has been chosen as a function of the Hubble parameter. In presence of this bulk viscous pressure, we have checked how the equation of state parameter is behaving in a bouncing universe. Also, the generalized second law of thermodynamics has been tested. Finally, we have discussed how this bounce can occur with the scalar field model.

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