Bianchi type-III string cosmological models for stiff and anti-stiff fluid in general relativity

ABSTRACT

Bianchi type-III string cosmological models in the presence of stiff and anti-stiff fluids are studied. The scalar expansion is assumed to be proportional to the shear. In the present study, we consider two cases (i) \( p + \rho = 0 \) and (ii) \( p - \rho = 0 \), where \( \rho \) and \( p \) are the rest energy density and the pressure of the fluid, respectively. The physical behavior of these models is also discussed.

**Keyword:** Bianchi type II models; Stiff fluid; Anti-stiff fluid