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 ρ and p are the rest energy density and the pressure of the fluid, respectively. The physical behavior of these models is also discussed.