On Kasner solution in Bianchi I $f(T)$ cosmology

Monday, 22 October 2018 15:40 (150)

Recently cosmological dynamics of anisotropic Universe in $f(T)$ gravity became an area of intense investigations. Some earlier papers devoted to this issue contain contradictory claims about the nature and propertied of vacuum solutions in this theory. The goal of the present paper is to clarify this situation. We compare properties of $f(T)$ and $f(R)$ vacuum solutions and outline differences between them. The Kasner solution appears to be an exact solution for the $T = 0$ branch, and an asymptotic solution for $T \neq 0$ branch. It is shown that Kasner solution is the past attractor if $T < 0$, being past and future attractor for $T > 0$ branch.

Primary author(s) : SKUGOREVA, Maria; TOPORENSKY, Alexey (Sternberg Astronomical Institute, Moscow)

Presenter(s) : SKUGOREVA, Maria

Session Classification : Poster session and coffee-buffet