

Geometrical behaviors of LRS bianchi type-I cosmological models.

ABSTRACT

By using Einstein's theory of general relativity some properties of spatially homogeneous locally rotationally symmetric (LRS) Bianchi type-I space-time are investigated in empty space. The concept of Riemannian curvature tensor, Ricci tensor and Ricci scalar has been used to discuss the geometrical behavior of the space-time. It is shown that, LRS Bianchi type-I has always flat geometry in empty space. Also we have shown that the vacuum model does not have singularity when time goes to zero.

Keyword: Cosmological models; LRS bianchi type-I models; Curvature tensor; Ricci tensor.