

## BIANCHI TYPE $VI_0$ STRING COSMOLOGICAL MODEL IN LYRA'S MANIFOLD

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**Abstract:** A solution of field equations has been obtained for a Bianchi Type  $VI_0$  space-time with cosmic string in Lyra's Manifold by using relation between metric coefficients and Reddy string. Also some physical and kinematic properties of the model have been examined.

**Keywords and Phrases:** Bianchi Type  $VI_0$ , Cosmic string, Lyra's Manifold.

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### 1. Introduction

Lyra [9] proposed an alternation of Riemannian geometry by introducing a gauge function into the structure less manifold because of which the cosmological constant emerges naturally from the geometry. Sen [23] considered the cosmological model of the Universe based on Lyra's modified Riemannian geometry and showed that the model is just like the static Einstein model and has a finite density even without the creation of a cosmological constant. In curious investigation Sen and Dunn [22] expressed a new scalar tensor theory of gravitation and constructed comparison of the Einstein field equation based on Lyra's geometry. Cosmological