

## ON CONFORMALLY FLAT LP-SASAKIAN MANIFOLDS WITH A COEFFICIENT $\alpha$

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### Abstract

Recently, the notion of Lorentzian almost paracontact manifolds with a coefficient  $\alpha$  has been introduced and studied by De et al [3]. In the present paper we investigate conformally flat LP-Sasakian manifolds with a coefficient  $\alpha$ .

### 0. Introduction

In 1989, Matsumoto [1] introduced the notion of LP-Sasakian manifolds. Then Mihai and Rosca [2] introduced the same notion independently and they obtained several results in this manifold. In a recent paper, De, Shaikh and Sengupta [3] introduced the notion of LP-Sasakian manifolds with a coefficient  $\alpha$  which generalizes the notion of LP-Sasakian manifolds. Recently, T.Ikawa and his coauthors [4],[5] studied Sasakian manifolds with Lorentzian metric and obtained several results in this manifold. The object of the present paper is to study an LP-Sasakian manifold with a coefficient  $\alpha$ .

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