

ON CONHARMONICALLY AND SPECIAL WEAKLY RICCI SYMMETRIC LORENTZIAN β -KENMOTSU MANIFOLDS

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Abstract

The aim of the present paper is to study some geometric properties of Conharmonically at Lorentzian β -Kenmotsu manifold and a Lorentzian β -Kenmotsu manifold satisfying $R(X; Y).H = 0$ and prove that a special weakly Ricci symmetric Lorentzian β -Kenmotsu manifold cannot be an Einstein manifold if 1-form α is not equal to zero.

Key Words : β -Kenmotsu manifold, Lorentzian β -Kenmotsu manifold, Conharmonic curvature tensor, Einstein manifold.

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