

On W_{jkh}^i in Generalized βP – Recurrent and Birecurrent Finsler Space

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ABSTRACT

Finsler geometry is a kind of differential geometry. It usually considers as a generalization of Riemannian geometry. It has many applications in various fields of Physics such as the theory of relativity. The generalized recurrence and birecurrence property in Finsler space have been discussed by the Finslerian geometrics. The aim of this paper is to study the relationship between Wely's projective curvature tensor W_{jkh}^i and Cartan's second curvature tensor P_{jkh}^i in generalized recurrent and birecurrent space. Additionally, we find the condition for the curvature tensor W_{jkh}^i that is generalized recurrent and birecurrent tensor. Further, diverse theorems have been established and proved.

Keywords: Finsler space; Wely's projective curvature tensor W_{jkh}^i ; Cartan's second curvature tensor P_{jkh}^i ; Berwald's covariant derivative.

