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Recurrent Finsler Structures with Higher-Order Generalizations Defined by Special Curvature Tensors

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Abstract: This paper introduces a class of Finsler structures, termed hyper-generalized recurrent Finsler structures. These structures are defined by particular curvature tensors in conjunction with Berwald's covariant differentiation. This paper extends the theory of recurrent Finsler structures by introducing a new class of structures defined by specific curvature tensors and Berwald's covariant differentiation. The findings of this research contribute to a deeper understanding of the intricate interplay between curvature and recurrent properties in Finsler geometry

Keywords: Finsler structures, Berwald covariant derivative, curvature tensor, geometric properties

