D-CONCURRENT VECTOR FIELDS IN A FINSLER SPACE OF FIVE-DIMENSIONS

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ABSTRACT

The purpose of the present paper is to define and study D-concurrent vector fields in a Finsler space of five-dimensions. In this paper, D-concurrent vector fields of first kind based on D-tensors of first kind in a Finsler space of Five-dimensions have been defined and studies. The expressions for h- and v-covariant differentiations of D-tensor of first kind have also been obtained. Besides this, the Q-concurrent vector field in a five-dimensional Finsler space based on ^1Q-tensor is defined in this paper. Furthermore, a curvature tensor $^1D_{ijkh}$ based on D-tensor is also defined, its expression obtained and some properties studied.

KEYWORDS: *D-Concurrence, Curvatures and Five-Dimensional Finsler Space*