Year: 2009 | Vol.: 74 | Fasc.: 3-4

Title: P-Berwald manifolds

Author(s): Sándor Bácsó and Zoltán Szilasi

We introduce a new class of special Finsler manifolds, the class of p-Berwald manifolds. P-Berwald manifolds are defined as Finsler manifolds for which the projected Berwald curvature vanishes. We show that an at least 3-dimensional Finsler manifold is a p-Berwald manifold if and only if it is a weakly Berwald Douglas manifold. 2-dimensional p-Berwald manifolds are characterized by means of a differential equation concerning the main scalar. We prove that a p-Berwald manifold is R-quadratic if and only if its stretch tensor vanishes.

## Address:

Sándor Bácsó Institute of Informatics University of Debrecen H-4010 Debrecen Hungary

Address: Zoltán Szilasi Institute of Informatics University of Debrecen H-4010 Debrecen Hungary