

On the 1-homogeneous non-linear connections

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ABSTRACT.

In this paper, we show that for every semispray S on a vector bundle $(R \times TM, \pi, R \times M)$, there are several sequences of semisprays and correspondingly several nonlinear connections associated to it. It is important to derive conditions on S , which guarantee that a sequence of nonlinear connections associated to S is constant. We show that the homogeneity condition for S yields the result.

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