

## A STUDY ON THE $N$ -DIMENSIONAL $SE$ -CONNECTION AND ITS CONFORMAL CHANGE

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The purpose of the present paper is to investigate properties of  $n$ -dimensional  $SE$ -connection  $\Gamma_{\lambda\mu}^{\nu}$  and its change induced by the conformal change. In the present paper, we shall find a necessary and sufficient condition for the existence of a unique  $SE$ -connection and derive its surveyable representations in terms of the tensor  $g_{\lambda\mu}$ . We also derive a useful representation of its change induced by the conformal change. All considerations in this paper are dealt for general  $n$ , for all classes, and for all possible indices of inertia.

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