

THE COMPLETE AND HORIZONTAL LIFTS OF TENSOR FIELDS OF TYPE $(1, q)$ IN $T_2^0(M_n)$.

Abstract

The complete and horizontal lifts of a tensor field s of type $(1, q)$ to a tensor fiber of type $(0, 2)$ along a pure tensor subfiber of type $(0, 2)$ is determined by means of the I and II kind Yano-Ako generalized operator. Invariance of complete and horizontal lifts are also established. The principal properties of a complete lift of tensor fields to a tensor fiber of type $(0, 2)$ are defined. Complete lifts of a tensor of Nyeenheyes affinors to a tensor fiber of type $(0, 2)$ along the pure tensor fiber of type $(0, 2)$ are structured. The relation between complete and horizontal lifts of tensor fields of type $(1, q)$ to a tensor fiber of type $(0, 2)$ along a pure tensor subfeber of type $(0, 2)$ is investigated. Principal properties of a horizontal lift of tensor fields of type $(1, q)$ are studied.