

CARTESIAN PRODUCT OF r -HYPERBOLIC HERMITE MANIFOLDS

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ABSTRACT

In the present paper we have studied Cartesian product of r -hyperbolic Hermite manifolds. Cartesian product of two manifolds has been defined and studied by Pandey. In this paper we have taken Cartesian product of r -hyperbolic Hermite manifolds, where r is some finite integer and studied some properties of Curvature and Ricci tensor of such a product manifold and their hypersurfaces. The paper is organized as follows. In section one, introductory part of almost hyperbolic Hermite manifolds is defined. In section two, we prove that the some theorems of product manifolds in almost hyperbolic Hermite manifolds as well as Kähler structure manifolds as well as contact structure manifolds. In section three, we have studied some properties of Curvature and Ricci tensor and prove some theorems.

KEY WORDS & PHASES: r -hyperbolic Hermite manifolds, Kähler structure manifolds, Tachibana manifolds, KH-structure, Einstein spaces.

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