

Some Characterizations of Constant Breadth Timelike Curves in Minkowski 4-space E^4

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Abstract

In this study, the differential equation characterizations of timelike curves of constant breadth are given in Minkowski 4-space E^4 . Furthermore, a criterion for a curve to be the timelike curve of constant breadth in E^4 is introduced. As an example, the obtained results are applied to the case that the curvatures k_1, k_2, k_3 and are discussed.

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