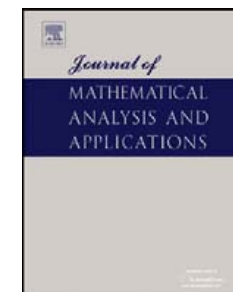




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Position vector of a time-like slant helix in Minkowski 3-space

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ABSTRACT

In this paper, position vector of a time-like slant helix with respect to standard frame of Minkowski space E_1^3 is studied in terms of Frenet equations. First, a vector differential equation of third order is constructed to determine position vector of an arbitrary time-like slant helix. In terms of solution, we determine the parametric representation of the slant helices from the intrinsic equations. Thereafter, we apply this method to find the representation of a time-like Salkowski and time-like anti-Salkowski curves as examples of a slant helices, by means of intrinsic equations. Moreover, we present some new characterizations of slant helices and illustrate some examples of our main results.

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