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Geometry of spacelike generalized constant ratio surfaces in Minkowski 3-space. (English)

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Summary: Generalized constant ratio surfaces are defined by the property that the tangential component of the position vector is a principal direction on the surfaces. In this work, we study these class of surfaces in the 3-dimensional Minkowski space \mathbb{L}^3 . We achieve a complete classification of spacelike generalized constant ratio surfaces in \mathbb{L}^3 .

MSC:

53B25 Local submanifolds

53B30 Local differential geometry of Lorentz metrics, indefinite metrics

Cited in 2 Documents

Keywords:

generalized constant ratio (GCR) surface; constant slope surface; constant ratio surface

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