

Siacci's and the areal basis resolution of the acceleration vector for a space curve in Minkowski 3-space

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We give a kinematic decomposition, known as the Siacci's resolution, of the acceleration vector along a space curve in Minkowski 3-space, depending on the causal character of the curve. We also obtain the corresponding decomposition of the acceleration vector in terms of the areal basis of the curve and give some examples.

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 - [2] Casey J. Areal velocity and angular momentum for non-planar problems in particle mechanics. *American Journal of Physics*. 2007; 75:, 677-685.
 - [3] Walrave J. Curves and surfaces in Minkowski space. Ph. D. Thesis, KU Leuven. 1995.
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