

Title: Focal set of curves in the Minkowski space near lightlike points

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We study the geometry of curves in the Minkowski space and in the de Sitter space, specially at points where the tangent direction is lightlike (i.e. has length zero) called lightlike points of the curve. We define the focal sets of these curves and study the metric structure of them. At the lightlike points, the focal set is not defined. We use singularity theory techniques to carry out our study and investigate the focal set near lightlike points.

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