

# On Harmonic Curvatures of Null Curves of the $AW(k)$ -Type in Lorentzian Space

Mihriban Külahcı, Mehmet Bektaş, and Mahmut Ergüt

Department of Mathematics, Firat University, 23119 Elazığ, Turkey

Reprint requests to M. K.; Fax:+90 424 2330062; E-mail: mihribankulahci@gmail.com

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We investigate null curves of the  $AW(k)$ -type ( $1 \leq k \leq 3$ ) in the 3-dimensional Lorentzian space,  $L^3$ , and give curvature conditions of these curves by using the Cartan frame. Moreover, we study harmonic curvatures of curves of  $AW(k)$ -type and show that if the  $\alpha$  Frenet curve is of type  $AW(1)$ , then  $\alpha$  is a null helix.

*Key words:* Null Curve; Harmonic Curvature; Frenet Formulas;  $AW(k)$ -Type Curve.

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