

FINITE-TIME BLOWUP  
AND EXISTENCE OF GLOBAL SOLUTIONS  
FOR A LOGARITHMIC SEMILINEAR HYPERBOLIC EQUATION

K. RAJENDRA PRASAD, MAHAMMAD KHUDDUSH, and BOTTA BHARATHI

**Abstract.** In this paper we consider the semilinear wave equation with the product of logarithmic and polynomial nonlinearities and establish the global existence and finite-time blowup of solutions by using the potential well method.

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**Key words.** Global existence, finite-time blowup, logarithmic and polynomial nonlinearity, potential well.

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*Andhra University*  
*College of Science and Technology*  
*Department of Applied Mathematics*  
*Visakhapatnam, 530003, India*  
*E-mail: rajendra92@rediffmail.com*  
<https://orcid.org/0000-0001-8162-1391>  
*E-mail: khuddush89@gmail.com*  
<https://orcid.org/0000-0002-1236-8334>

*College of Engineering for Women*  
*Department of Mathematics*  
*Gayatri Vidya Parishad*  
*Visakhapatnam, 530048, India*  
*E-mail: bharathi0401@gmail.com*