Bright, dark, periodic and kink solitary wave solutions of evolutionary Zoomeron equation

Ghazala Akram¹, Maasoomah Sadaf², and Iqra Zainab¹

¹University of the Punjab ²University of the Punjab Quaid-i-Azam Campus

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Abstract

The modified auxiliary equation (MAE) approach and the generalized projective Riccati equation (GPRE) method are used to solve the Zoomeron problem in this study. Different types of exact traveling wave solutions are achieved, including solitary wave, periodic wave, bright, dark peakon, and kink-type wave solutions. Earned results are given as hyperbolic and trigonometric functions. Moreover, the dynamical features of obtained results are demonstrated through interesting plots.

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