



**TRAVELING WAVE SOLUTIONS OF A MODEL OF LONG  
RANGE DIFFUSION INVOLVING FLUX BY THE tanh-coth  
FUNCTION METHOD**

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**Abstract**

In this paper, we consider the traveling wave solutions of a PDE model with long range diffusion involving flux. By using the tanh-coth function method, we obtain six classes of exact traveling wave solutions under different parameter conditions. It is shown that the tanh-coth method provides a powerful mathematical tool for solving a great many nonlinear partial differential equations.

**Keywords and phrases:** The tanh-coth method, traveling wave solutions, soliton solutions, periodic solutions.

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