

Exact and numerical solutions for the nano-soliton of ionic waves propagating through microtubules in living cells

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Abstract

In this article, the Paul-Painleve approach (PPA) which discovered recently and built on the balance role has been used perfectly to achieve new impressive solitary wave solutions to the nano-soliton of ionic waves (NSOIW) propagating along microtubules in living cells. In addition, the variational iteration method (VIM) has been applied in the same vein and parallel to establish the numerical solutions of this model.

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