Adomian Decomposition Method for Approximating the Solution of the High-Order Dispersive Cubic-Quintic Nonlinear Schrödinger Equation

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In this paper, the decomposition method is implemented for solving the high-order dispersive cubic-quintic nonlinear Schrödinger equation. By means of Maple the Adomian polynomials of obtained series solution have been calculated. The results reported in this article provide further evidence of the usefulness of Adomain decomposition for obtaining solutions of nonlinear problems. – PACS numbers: 02.30.Jr; 02.60.Cb; 42.65.Tg

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