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Optical Soliton Perturbation with Generalized Quadratic–Cubic Nonlinearity by semi–Inverse Variation*

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The current work recovers a perturbed bright 1-soliton solution to the governing model that maintains generalized quadratic–cubic nonlinearity. The perturbation terms appear with full intensity. The semi-inverse variational principle secures this soliton when all of the known approaches fail, in this regard.

Key words: solitons; quadratic-cubic; semi-inverse variation.

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