



**THREE-DIMENSIONAL SPATIOTEMPORAL BREATHER
SOLUTIONS AND ROGUE WAVES IN THE
NONLOCAL NONLINEAR MEDIA**

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Abstract

In this paper, we have studied three-dimensional spatiotemporal breather solutions and rogue waves in the nonlocal nonlinear media. The governing equations are nonlinear, with using a transformation, the nonlinear differential equations can be transformed into a standard nonlinear Schrödinger equation. Finally, we have obtained some closed form solutions.

Keywords and phrases: nonlocal nonlinear media, three-dimensional spatiotemporal breather solution, rogue waves, dynamic behavior.

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