The Soliton Solutions of (2+1)-Dimensional Nonlinear Two-Coupled Maccari Equation with Complex Structure via New Kudryashov Scheme

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Abstract: In this study, we tackle with the (2+1)-dimensional complex nonlinear two-coupled Maccari equation which is a kind of Schrodinger equation and presented by Attilio Maccari in 1996. The Maccari equations has an importance to define the motion of isolated waves concentrated in a tiny region of space in a variety of fields, including hydrodynamics, plasma physics, quantum field theory, nonlinear optics, the sonic Langmuir solitons and so on. We utilized the popular method namely new Kudryashov scheme, we obtained the soliton solutions, graphical representations and made its physical interpretation..

Keywords: Coupled-Maccari system, new Kudryashov scheme, soliton solutions
Mathematics Subject Classification:

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