

Peer Review

Review of: "Multidimensional Soliton Systems: an Update"

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This review briefly summarizes recent key advances in multidimensional solitons within nonlinear optics and cold atomic Bose–Einstein condensates (BECs). As a subject of intense experimental and theoretical interest, multidimensional solitons and related nonlinear modes—including quantum droplets—represent a rapidly evolving research front. Their relevance spans multiple disciplines, from optics and quantum matter to potential extensions in plasma physics, hydrodynamics, and condensed matter systems, with prominent examples such as magnetic skyrmions illustrating broader applicability. This work outlines the latest progress, suggests promising research directions, and serves as a reference for investigators in associated fields.

Declarations

Potential competing interests: No potential competing interests to declare.