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Soliton solutions to the nonlinear Schrödinger equation SAMUEL

RIVERA, APS — Solitary wave (soliton) solutions are considered for the nonlinear Schrödinger equation $iu_t + u_{xx} + 2|u|^2u = 0$. Their physical importance is studied, and a Mathematica program is presented producing such soliton solutions and their updated animations.

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