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Alfredo Villanueva* (villanuevaa@savannahstate.edu). *Solutions of nonlinear Schrodinger equations.*

Analytic methods for solving Nonlinear Schrodinger Equations (NLSE) have been developed in some cases. In this article we modified an ansatz substitution (this was used for solving NLSE with variable quadratic Hamiltonian, where the authors found solitons and soliton-like solutions) to solve the Chiral NLSE with time-dependent coefficients and integrability condition. We also, look at higher-order non-linear Schrodinger equations. (Received September 22, 2015)