
STEFAN LE COZ, University of Toulouse

Stability of multi-solitons for the derivative nonlinear Schrödinger equation

The nonlinear Schrödinger equation with derivative cubic nonlinearity (dNLS) is a model quasilinear dispersive equation. It admits a family of solitons, which are orbitally stable in the energy space. After a review of the many interesting properties of dNLS, we will present a result of orbital stability of multi-solitons configurations in the energy space, and some ingredients of the proof.