Orbital stability of spatially periodic waves to subharmonic perturbations

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Abstract

Over the last several years there has been interest in the stability of spatially periodic waves to subharmonic perturbations for Hamiltonian systems, especially in the event the wave is stable subject to a harmonic perturbation. I will review what is known about the problem, what are the central issues that need to be addressed in resolving it, and how it all connects to the orbital stability of N-solitons for integrable systems.