Mathematics > Analysis of PDEs

Stability of bound states of Hamiltonian PDEs in the degenerate cases

Masaya Maeda

(Submitted on 19 Jul 2011)

We consider a Hamiltonian systems which is invariant under a one-parameter unitary group. We give a criterion for the stability and instability of bound states for the degenerate case. We apply our theorem to the single power nonlinear Klein-Gordon equation and the double power nonlinear Schr\"odinger equation.

Comments: 16 pages
Subjects: **Analysis of PDEs (math.AP)**
Cite as: **arXiv:1107.3629 [math.AP]**
(or **arXiv:1107.3629v1 [math.AP]** for this version)

Submission history

From: Masaya Maeda [view email]
[v1] Tue, 19 Jul 2011 05:56:10 GMT (14kb)

Which authors of this paper are endorsers?