



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 Schrödinger 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?](#)

Link back to: [arXiv](#), [form interface](#), [contact](#).

Download:

- [PDF](#)
- [PostScript](#)
- [Other formats](#)

Current browse context:

math.AP

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1107](#)

Change to browse by:

[math](#)

References & Citations

- [NASA ADS](#)

Bookmark([what is this?](#))

