1126-35-176 Scipio Cuccagna (scuccagna@units.it), Department of Mathematics and Geosciences, University of Trieste, 34127 Trieste, Italy, Masaya Maeda (maeda@math.s.chiba-u.ac.jp), Department of Mathematics and Informatics, Faculty of Science, Chiba University, Chiba, Japan, and Tuoc Phan* (phan@math.utk.edu), Department of Mathematics, University of Tennessee, Knoxville, 227 Ayres Hall. 1403 Circle Drive., Knoxville, TN 37996-1320. On small energy stabilization in the NLKG with a trapping potential.

We consider a nonlinear Klein Gordon equation (NLKG) with short range potential with eigenvalues and show that in the contest of complex valued solutions the small standing waves are attractors for small solutions of the NLKG. This extends the results already known for the nonlinear Schrödinger equation and for the nonlinear Dirac equation. In addition, this extends a result of Bambusi and Cuccagna (which in turn was an extension of a result by Soffer and Weinstein) which considered only real valued solutions of the NLKG. (Received January 12, 2017)