

**ASYMPTOTIC STABILITY FOR SOME NONLINEAR  
KLEIN-GORDON EQUATIONS FOR ODD PERTURBATIONS IN  
THE ENERGY SPACE**

MICHAŁ KOWALCZYK

Showing asymptotic stability in one dimensional nonlinear Klein-Gordon equations is a notoriously difficult problem. In this talk I will describe an approach based on virial estimates which allows to prove it in case when only odd perturbations are allowed. In particular I will discuss asymptotic stability of the kink in the  $\phi^4$  model.