



universität
wien



DK Seminar

November 4, 2015, 14:15 - 15:00
Vienna University of Technology,
Freihaus, green area, 4th floor, 101C

Marcel Oliver

Jacobs University Bremen

A variational approach to the non-relativistic limit of the semilinear Klein-Gordon equation

In systems with strong gyroscopic forces, approximate equations for the dynamics on a slow manifold can be found via variational asymptotics. The results generally differ from those obtained by classical Hamiltonian normal form theory. We explain the method, using the non-relativistic limit of the nonlinear Klein-Gordon equation as an example, and prove a shadowing result for this particular case.