



EINLADUNG

im Rahmen des Literaturseminars

zum Vortrag von

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(SISSA)

über

“Massive Cantor families of periodic solutions of resonant Klein-Gordon equation on S^3 “

Abstract:

The study of existence and multiplicity of time-periodic solutions for semilinear Klein-Gordon equation has recently been proposed as a toy model to understand stability properties of Anti-de Sitter spacetime under certain perturbation, a question which is of great interest in general relativity.

I will present a result on existence and multiplicity of Cantor families of small amplitude, analytic in time and periodic solutions for the completely resonant cubic nonlinear Klein-Gordon equation on S^3 for an asymptotically full measure set of frequencies. The solutions are constructed by a Lyapunov-Schmidt decomposition and a Nash-Moser iterative scheme. We first find non-degenerate solutions of the resonant system, then, in view of small divisors problem, we solve the Range equation by a Nash-Moser iteration.

Zeit: Mittwoch, 3.7.2024, 14:00-15:30h

Ort: Seminarraum A, Währinger Straße 17, 2. Stock

<https://univienne.zoom.us/j/6540036841?pwd=SytyVkZJZzNyRG9IMm13ejlHeHRRUT09>