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E I N L A D U N G

im Rahmen des Literaturseminars

zum Vortrag

von

Oleg Evnin

(Bangkok/Brussels)

über

„AdS and Cold Atoms“

Abstract:

Taking nonrelativistic limits of field systems in Anti-de Sitter (AdS) spacetime results in variants of the Gross-Pitaevskii equation describing cold atomic gases in harmonic traps (which can be implemented in contemporary terrestrial experiments).
This relation underlies the similarities in weakly nonlinear dynamics of these two classes of systems (AdS and atomic gases) whose investigation is normally motivated by rather different physical goals (phenomenology of Bose-Einstein condensation vs. studies of strongly coupled conformal field theories in the context of AdS holography). I will explain how the weakly nonlinear dynamics of such systems is analyzed via the so-called resonant approximation, and present a range of surprising exact results and open questions for the effective nonlinear resonant systems arising from such analysis.

Zeit: Dienstag, 25.9.2018, **14.00**
Ort: Arbeitsgruppe Gravitation, Währinger Straße 17,
Seminarraum A, 2. Stock

gez.: P. Chrusciel, M. Maliborski