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E I N L A D U N G

im Rahmen des Seminars für Mathematische Physik

(Joint TU/UV Theory Seminar)

zum Vortrag

von

Matthieu Vilatte

(Ecole Polytechnique, Paris & Aristotle University of Thessaloniki)

über

„Probing the asymptotic structure of 4d Einstein gravity:

flat from AdS"

Abstract:
My talk will focus on the structure of gravity at large distances and especially on how one can get insights on the asymptotically flat structure from the one of Anti-de Sitter spacetimes. I will start by recalling some basics on the gauge fixing approach to the IR structure of gravity, insisting on the fundamental examples of the Fefferman-Graham and Bondi gauges and on asymptotically AdS and flat spacetimes. As Ricci flat solutions are usually obtained from a the \Lambda -> 0 limit of Einstein´s spacetimes, I will describe how one can get the flat solution space and flux/balance equations from a careful Laurent expansion of the AdS energy-momentum tensor and the requirement of the line-element finiteness, the analysis being conducted in a covariant version of the Newman-Unti gauge that will be presented prior to these developments.

Zeit: Dienstag, **16.1.2024, 14.00 h**

Ort: Erwin-Schrödinger-Hörsaal, Fakultät für Physik, Boltzmanngasse 5, 5. Stock

gez.: S. Fredenhagen, D. Grumiller, T. Tran, A. Fiorucci