Fakultät für Physik
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E I N L A D U N G

Literaturseminar

zum Vortrag

von

Dietrich Haefner

(Grenoble, Frankreich)

über

„Linear stability of slowly rotating Kerr spacetimes“

Abstract:
In joint work with Peter Hintz and András Vasy, we study the asymptotic behavior of linearized gravitational perturbations of Schwarzschild and slowly rotating Kerr black hole spacetimes. We show that solutions of the linearized Einstein equation decay at an inverse polynomial rate to a stationary solution (given by an infinitesimal variation of the mass and angular momentum of the black hole), plus a pure gauge term. In this talk, I will describe the geometric background and the analytic setup of our result, including a discussion of gauge fixing. Our proof is based on a precise description of the resolvent of an associated wave equation on symmetric 2-tensors near zero energy.

Zeit: Donnerstag, 07.11.2019, **14.00**
Ort: Arbeitsgruppe Gravitation, Währinger Straße 17,
Seminarraum 218, 2. Stock

gez.: P. T. Chruściel, D. Fajman