



EINLADUNG

im Rahmen Literaturseminars

zum Vortrag

von

Helmut Friedrich

(AEI Potsdam)

über

„Cosmological models: Hierarchies of asymptotic behaviour“

Abstract:

De Sitter space-time is a geodesically complete, conformally flat, spatially compact solution to the Einstein- λ -vacuum equations with cosmological constant λ that admits smooth conformal boundaries \mathcal{J}^{\pm} at future and past time-like infinity. Data sufficiently close to de Sitter data develop into solutions to the Einstein- λ -vacuum equations that admit smooth conformal boundaries as well.

These solutions extend, as solutions to the conformal Einstein equations, beyond these boundaries where they define again solutions to the Einstein- λ -vacuum equations.

Gravitational radiation, i.e. perturbations to the conformal Weyl tensor, travels unimpeded across \mathcal{J}^{\pm} into the extended domain.

In this talk we discuss our interest in this phenomenon and the question to what extent it generalizes to the future developments of solutions to the Einstein- λ equations coupled to various matter fields.

**Zeit: Donnerstag, 16.11.2023 – 15.15 h - Seminarraum A,
Währinger Straße 17, 2. Stock**

gez.: P. Chrusciel, D. Fajman