

EINLADUNG

Literaturseminar

zum Vortrag von

Bruno Premoselli

(Bruxelles)

über

"Existence of infinitely many solutions for the Einstein-Lichnerowicz system"

Abstract:

We will consider in this talk the Einstein-Lichnerowicz system of equations. It originates in General Relativity as a way to determine initial-data sets for the evolution problem. This system takes the form of a strongly coupled, supercritical, nonlinear system of elliptic PDEs. We will investigate its blow-up properties and show that, in large dimensions, it possesses a non-compact family of solutions. This family of solutions will be constructed by combining toplogical methods with a finite-dimensional reduction approach; due to the non-variational structure of the system, the latter has to be carried on in strong spaces and relies of a priori blow-up estimates that we shall describe.

Zeit: Donnerstag, 30.01.2020, **14.00**

Ort: Arbeitsgruppe Gravitation, Währinger Straße 17,

Seminarraum 218, 2. Stock

gez.: P. T. Chruściel, D. Fajman