



E I N L A D U N G

Lunchseminar

zum Vortrag

von

Håkan Andréasson

University of Gothenburg / Chalmers University of Technology

über

***“On the existence and structure of stationary solutions
of the Einstein-Vlasov system”***

Abstract:

The structure of spherically symmetric static solutions is quite well understood and I will discuss a number of their features since they indicate what features can be expected of axisymmetric solutions. Existence of axially symmetric stationary solutions that are perturbed off from spherically symmetric Newtonian solutions have been obtained analytically whereas solutions far from spherically symmetric have only been constructed numerically. I will discuss the properties of the latter. In particular, two different sequences of toroidal solutions which contain ergoregions will be described in detail. These solutions either approach an extreme Kerr black hole or they have the property that the geometry becomes conical in the limit and such solutions may provide models of cosmic strings.

Zeit: Mittwoch, 28.11.2018, 13.00

Ort: Arbeitsgruppe: Gravitation, Währinger Straße 17,
Raum 218, 2. Stock

gez.: P. T. Chrusciel, D. Fajman