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E I N L A D U N G

im Rahmen des Literaturseminars

zum Vortrag

von

Tim Paetz

(Vienna)

über

„On the smoothness of the cylinder at spatial infinity in vacuum spacetimes“

ABSTRACT:
It is well-known that spatial infinity cannot be represented as a regular point due to blow-ups of the Weyl tensor whenever the ADM mass is non-zero. Because of this, the construction of vacuum spacetimes which admit a smooth past and future null infinity turns out to be a rather intricate problem. An approach which avoids these blow-ups is a cylinder representation of spatial infinity. However, for generic initial data the solutions will pick up log-terms at the critical sets where the cylinder "touches" null infinity. The goal of this talk is to set up an asymptotic initial value problem with data at past null infinity and to derive necessary conditions for the smoothness of these critical sets.

Zeit: Donnerstag, 9.3.2017, **14:00**

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

gez.: P. Chrusciel