



E I N L A D U N G

im Rahmen des Literaturseminars

zum Vortrag

von

Melanie Graf

(Vienna)

über

***„Low regularity Lorentzian metrics
and the causal character of maximizers“***

Abstract:

For metrics that are at least $C^{1,1}$ maximizing curves must be solutions of the geodesic equation and hence cannot change causal character: they must remain either timelike or null. This is no longer obvious for metrics of lower regularity and once the regularity drops below Lipschitz there are examples of "bubbling" metrics, for which maximizing causal curves may contain both timelike and null segments. We will present a recent result stating that Lipschitz regularity of the metric is sufficient for maximizing curves to have fixed causal character and show how this almost immediately gives a Lipschitz inextendibility result for timelike geodesically complete spacetimes. This is joint work with E. Ling.

Zeit: Donnerstag, 8.3.2018, **14.00**

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

gez.: P. Chrusciel