



# *EINLADUNG*

im Rahmen des Literaturseminars

zum Vortrag

von

**Oliver Petersen**

(Universität Hamburg)

über

*„Wave equations with initial data  
on compact Cauchy horizons“*

**Abstract:**

I will present a new existence and uniqueness result for wave equations with initial data on compact Cauchy horizons. As counter examples show, it is necessary to assume that the surface gravity of the Cauchy horizon can be normalised to a non-zero constant. This generalizes classical results proven under the assumption of either analyticity or symmetry of the spacetime or closedness of the generators. In particular, the result is useful in understanding the geometry of vacuum spacetimes with a compact Cauchy horizon. This problem is closely related to the strong cosmic censorship conjecture.

**Zeit:** Donnerstag, 18.10.2018, 14.00

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

gez.: P. Chrusciel, D. Fajman