



Sommersemester 2017

**Oberseminar**  
**Geometrische Analysis, Differentialgeometrie und Relativitätstheorie**

Am Mittwoch, den 12.07.2017 spricht um 16 Uhr c. t. im Raum S11

**Dr. Armando Cabrera**  
(University of Connecticut)

über das Thema

**On estimates for the Bartnik mass of CMC Bartnik data**

In general relativity a measure of how much energy is contained in a finite region of a spacetime is called a quasi-local mass. One of the most promising notions of quasi-local mass is the Bartnik mass; however, it is very difficult to compute. Recently, Mantoulidis and Schoen were able to compute the Bartnik mass of outermost apparent horizons in time-symmetric initial data sets. In this talk we will describe how to adapt their method to obtain new estimates for the Bartnik mass of CMC Bartnik data. This talk is based on a joint work with Carla Cederbaum, Stephen McCormick and Pengzi Miao.

Hierzu wird herzlich eingeladen.

C. Cederbaum, G. Huisken