



Wintersemester 2017/18

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

Am Donnerstag, den 07.12.2017 spricht um 14 Uhr c. t. im Raum S9

**Dr. Armando Cabrera Pacheco**  
(Universität Tübingen)

über das Thema

**On the Stability of the Positive Mass Theorem for Asymptotically  
Hyperbolic Manifolds**

The Positive Mass theorem asserts that the ADM mass of an asymptotically flat Riemannian manifold with non-negative scalar curvature is non-negative; moreover, the ADM mass equals zero if and only if the manifold is isometric to the Euclidean space. It is then natural to ask about the stability of the Positive Mass theorem, i.e, if the ADM mass is close to zero, is the manifold close to being the Euclidean space? Huang and Lee proved the stability (in the sense of currents) of the Positive Mass theorem for asymptotically flat graphs. We will describe how to use results of Dahl, Gicquaud and Sakovich to adapt Huang and Lee's ideas to the stability of the Positive Mass theorem of asymptotically hyperbolic graphs.

Hierzu wird herzlich eingeladen.

C. Cederbaum, G. Huisken