



Wintersemester 2019/20

Oberseminar
Geometrische Analysis, Differentialgeometrie und Relativitätstheorie

Am Donnerstag, den 19.12.2019 spricht um 14 Uhr c. t. im Raum C9A03

Prof. Dr. Simon Brendle
(Columbia University)

über das Thema

A sharp logarithmic Sobolev inequality for submanifolds in Euclidean space

The logarithmic Sobolev inequality in Euclidean space plays an important role in PDE theory, as well as in probability. In 2000, Klaus Ecker proved a version of the logarithmic Sobolev inequality which holds on any submanifold of Euclidean space, albeit with a non-sharp constant. In this lecture, I will discuss a new approach based on the ABP maximum principle which gives the sharp constant in this inequality. Like the Michael-Simon Sobolev inequality, this inequality contains a term involving the mean curvature (in this case, the shrinker mean curvature).

Hierzu wird herzlich eingeladen.

C. Cederbaum, G. Huisken