



Wintersemester 2018/19

**Oberseminar
Geometrische Analysis, Differentialgeometrie und Relativitätstheorie**

Am Donnerstag, den 17.01.2019 spricht um 14 Uhr c. t. im Raum 7E02 (Hörsaalzentrum)

Dr. Adam Layne
(KIT Stockholm)

über das Thema

Stability Within T^2 -Symmetric Expanding Spacetimes

We present a recently completed, nonpolarized analogue of the asymptotic characterization of T^2 -symmetric Einstein flow solutions by Philippe LeFloch and Jacques Smulevici. We impose a far weaker condition, but obtain similar rates of decay for the normalized energy and associated quantities. Critical to this work have been novel numerical simulations which indicate that there is locally attractive behavior for those T^2 -symmetric solutions not subject to this weakened condition. This local attractor is distinct from the local attractor in our main theorem, thereby indicating that the polarized asymptotics are on one hand stable within a larger class than merely polarised solutions, but unstable within all T^2 -symmetric solutions.

Hierzu wird herzlich eingeladen.

C. Cederbaum, G. Huisken