



Sommersemester 2020

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

Am Donnerstag, den 09.07.2020 spricht um 14 Uhr c. t. per Videoübertragung

**Prof. Dr. Felix Finster**  
(Universität Regensburg)

über das Thema

**A Positive Mass Theorem for Static Causal Fermion Systems**

After a short introduction to causal variational principles, the mass will be defined abstractly as a limit of surface layer integrals comparing two minimizing measures asymptotically near infinity. I will explain a few properties of this mass and state a positive mass theorem. In order to get a connection to the mass of an asymptotically flat static spacetime, I will outline how to construct a static causal fermion system in such a spacetime, and in which sense the ADM mass corresponds to the mass of the resulting causal fermion system. I am reporting on joint work with Andreas Platzer.

Hierzu wird herzlich eingeladen. Bei Interesse bitte per E-Mail an [angelika.spoerer-schmidle@uni-tuebingen.de](mailto:angelika.spoerer-schmidle@uni-tuebingen.de) anmelden, um den Link zur Videoübertragung zu erhalten.

C. Cederbaum, G. Huisken, K. Kröncke