

Mathematisch-Naturwissenschaftliche Fakultät

Fachbereich Mathematik

AB Geometrische Analysis, Differentialgeometrie und Relativitätstheorie

Sommersemester 2020

Special Lecture Series

On August 5 at 4:15, as the third of three lectures this Semester,

Prof. Dr. Simon Brendle

(Columbia University)

will speak on

Compact ancient solutions to the Ricci flow in dimension 3

Ancient solutions are solutions of geometric flows which are defined infinitely far back in time. Ancient solutions play a key role in the study of the Ricci flow. In particular, Perelman showed that any finite time singularity of the Ricci flow in dimension 3 is modeled on an ancient solution which in addition is κ -noncollapsed; these are referred to as ancient κ -solutions.

In 2018, we obtained a complete classification of all noncompact ancient κ -solutions in dimension 3. In these lectures, we will discuss recent work with Panagiota Daskalopoulos and Natasa Sesum which gives a complete classification of all compact ancient κ -solutions in dimension 3.

This seminar will meet online. Please sign up by sending an email to Gerhard Huisken.

Hierzu wird herzlich eingeladen.

EBERHARD KARLS UNIVERSITÄT

TÜBINGEN

G. Huisken