EBERHARD KARLS UNIVERSITÄT TÜBINGEN

Mathematisch-Naturwissenschaftliche Fakultät

**Fachbereich Mathematik
AB Geometrische Analysis,
Differentialgeometrie und
Relativitätstheorie**

Oberseminar
Geometrische Analysis, Differentialgeometrie und Relativitätstheorie

Am **Mittwoch**, den **14.06.2023** spricht um **16 Uhr c.t.** im Raum **S10 (C06H10) und über Zoom**

Prof. Dr. Carlo Sinestrari
(University of Rome "Tor Vergata", Italy)

über das Thema

Convex ancient solutions of curvature flows

A solution of a curvature flow is called ancient if it is defined for all negative times. These solutions arise as limits of rescalings and have been deeply investigated since the work by Hamilton and Perelman on the Ricci Flow as a crucial tool to understand the singular behaviour.

In this talk we will recall the main recent results on ancient solutions of the Mean Curvature Flow and then consider the case of more general extrinsic curvature flows. We show that in many cases the shrinking sphere enjoys rigidity properties and can be characterized as the unique convex ancient solution satisfying a suitable additional restriction on the curvature pinching or on other geometric quantities. On the other hand, these flows also possess convex ancient solutions which become more and more eccentric for large negative times.

Den Zoom-Link erhalten Sie per E-Mail von Frau Martina Jung oder Frau Martina Neu.

For participating online, please sign up by sending an email to Martina Jung or Martina Neu.

Hierzu wird herzlich eingeladen.

Carla Cederbaum, Gerhard Huisken, zusammen mit Jan Metzger (Potsdam)