Oberseminar
Geometrische Analysis, Differentialgeometrie und Relativitätstheorie

Am Donnerstag, den **16.05.2024** spricht um **14 Uhr s.t.** im Raum **S9 (C6H05) und über Zoom**

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über das Thema

Correspondences and Geometric Invariants in CMC Initial
Data Sets

As first pointed out by Chruściel and Tod, there exists a correspondence between CMC initial data sets for the Einstein Equation with different values of the Cosmological constant. In particular, it relates the hyperbolic space in Anti-de Sitter (AdS) spacetime and the hyperboloid in Minkowski, and this fact has been extensively used to transfer knowledge from the asymptotically flat realm to the asymptotically AdS hyperbolic setting. In this talk, I will present some results obtained from a detailed investigation of this correspondence, focusing on its implications on the KIDs and the Killing developments of two CMC initial data sets related via this correspondence. I will introduce a notion of asymptotically corresponding initial data sets and discuss the construction of geometric invariants on such pairs of initial data. This is part of my ongoing PhD project, supervised by Carla Cederbaum.

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

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

Hierzu wird herzlich eingeladen.

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