



Oberseminar

Geometrische Analysis, Differentialgeometrie und Relativitätstheorie

Am Donnerstag, den **21.11.2024** spricht um **14 Uhr s.t.** im Raum **S9 (C6H05)** und über Zoom

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über das Thema

A geometric choice of asymptotically Euclidean coordinates via STCMC-foliations

Asymptotically Euclidean 3-dimensional initial data sets were shown to carry asymptotic foliations of closed hypersurfaces with constant spacetime mean curvature (Cederbaum-Sakovich, 2021). In order to prove the inverse implication of this result and hence the geometric characterization of being asymptotically Euclidean, we start from the purely geometric foliation and construct asymptotic coordinates from it, exploiting the properties of the induced Laplacian of the foliation leaves via a delicate analysis. We show that these coordinates are asymptotically Euclidean, and moreover seem well-adapted to the center of mass. This is joint work with A. Piubello.

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

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

Hierzu wird herzlich eingeladen.

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