



Oberseminar

Geometrische Analysis, Differentialgeometrie und Relativitätstheorie

Am Donnerstag, den **06.06.2024** spricht um **14 Uhr s.t.** im Raum **S9 (C6H05)** und über Zoom

Fernanda Roing
(University of Turin)

über das Thema

Sharp pinching theorems for complete CMC hypersurfaces in the sphere

In this talk we prove that every complete minimally immersed hypersurface in the sphere, whose second fundamental satisfies a pinching condition, is either totally geodesic or a minimal Clifford torus, thereby extending a well-known result by Simons, Lawson and Chern, do Carmo & Kobayashi from compact to complete. We also extend the corresponding result for hypersurfaces with nonvanishing constant mean curvature, due to Alencar & do Carmo, to complete immersed CMC hypersurfaces, under the optimal bound for their umbilicity tensor. Our approach is inspired by the conformal method of Fischer-Colbrie and Catino, Mastrolia & Roncoroni. This is a joint work with Mari and Savas-Halilaj.

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)