



**Oberseminar
Geometrische Analysis, Differentialgeometrie und Relativitätstheorie**

Am Donnerstag, den **11.07.2024** spricht um **14 Uhr s.t.** im Raum **S9 (C6H05)** und über Zoom

Andoni Royo Abrego
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über das Thema

Sobolev conformal structures on closed 3-manifolds

It is well-known in differential geometry that harmonic coordinates can be used to find the most regular expression for the components of the metric tensor. In fact, work of Sabitov-Shefel and De Turck-Kazdan in the late seventies showed that the optimal regularity of a Riemannian metric is governed by that of the Ricci tensor. In this talk we will discuss the conformal analogue problem. More precisely, we will study the following question: given a Riemannian metric of limited regularity, does it exist a more regular (even smooth) representative in its conformal class? This question is naturally linked to the Yamabe problem and finds applications in General Relativity.

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.

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