



## Oberseminar

### Geometrische Analysis, Differentialgeometrie und Relativitätstheorie

Am Donnerstag, den **08.02.2024** spricht um **14 Uhr s.t.** im Hörsaal **N15 (C-Bau)** und über **Zoom**

**Roberto de Santana Araújo**  
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über das Thema

### Homogeneous Ricci flows and the Dynamical Alekseevskii Conjecture

The Dynamical Alekseevskii Conjecture states that if a simply-connected homogeneous manifold is not contractible, then all homogeneous Ricci flow solutions on it have finite extinction time. Böhm showed that the conjecture is true for compact homogeneous spaces. In this talk, we will discuss the conjecture in the context of non-compact homogeneous spaces. In particular, I will present a structure result for the isometry group of non-compact homogeneous manifolds admitting an immortal Ricci flow solution. We will also discuss the long-time behavior of Ricci flows on a special family of Ricci flow invariant homogeneous metrics called awesome metrics, where we show the conjecture to be true.

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)