

22.06.2022

Einladung

zu der am **Mittwoch, den 29. Juni 2022,**
um **10:15 Uhr** im **Hörsaal M5** stattfindenden

Antrittsvorlesung

von **Herrn Prof. Dr. Gustav Holzegel**

über das Thema

„The Stability of Black Holes in General Relativity“

Kurzfassung: Black Holes feature among the most fascinating predictions of Einstein's theory of general relativity. In the past decades fundamental progress has been made both at the experimental level and at the level of their mathematical understanding, which is the topic of my talk. I will begin by connecting general relativity to the analysis of non-linear partial differential equations and describe the geometry of the most important black hole solutions. In the main part of the talk I will introduce the stability problem for black holes and focus on recent work with Dafermos, Rodnianski and Taylor establishing the non-linear stability of the Schwarzschild family of black holes. Emphasis will be put on explaining the interplay between geometry and analysis.

gez. Xiaoyi Jiang, Dekan