



EINLADUNG

im Rahmen Literaturseminars

zum Vortrag

von

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über

*„STATIC VACUUM SPACETIMES
WITH POSITIVE COSMOLOGICAL CONSTANT“*

Abstract:

Static vacuum metrics are solutions to the Einstein Field Equations with vanishing stress-energy tensor and featuring a very special metric structure (warped product). Such a structure induces a natural foliation of the spacetime into space-like slices which are all isometric to each other, so that the corresponding physical universe is static. We discuss the problem of the classification of such solutions in the case of positive cosmological constant. To this end, we introduce an appropriate notion of mass, showing that it satisfies a Positive Mass Statement and a Riemannian Penrose-like inequality. Building on this, we prove a uniqueness result for the Schwarzschild-de Sitter solution, which is somehow reminiscent of the well known Black Hole Uniqueness Theorem for the Schwarzschild solution.

Zeit: Donnerstag, 29.11.2018, 14.00

Ort: Arbeitsgruppe Gravitation, Währinger Straße 17,
Raum 218, 2. Stock

gez.: P. Chrusciel, D. Fajman