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E I N L A D U N G

as part of the joint relativity-geometric analysis seminar

zum Vortrag

von

Simon Raulot

(Université de Rouen, Frankreich)

über

„Yamabe invariants and Cheeger constant
on Poincaré-Einstein manifolds"

Abstract:
In the first part of this talk, we present an elementary proof of the rigidity of the hyperbolic space as the unique Poincaré-Einstein manifold whose boundary at infinity is the conformal round sphere. The proof relies on an inequality which relates the Yamabe invariant of the boundary with the one of a compactification of the bulk manifold. In a second part, we relate the Cheeger constant of such manifolds with the conformal type of the boundary at infinity . More precisely, we prove that this constant is exactly the dimension of the interior of the Poincaré-Einstein manifold if and only if the Yamabe invariant of the boundary is non negative. Several applications are then discussed.

Zeit: Donnerstag, 28.03.2019, **13.30**
 Ort: Arbeitsgruppe Gravitation, Währinger Straße 17,
        Seminarraum 218, 2. Stock

gez.: P. T. Chrusciel, D. Fajman