Wintersemester 2017/18

Oberseminar
Geometrische Analysis, Differentialgeometrie und Relativitätstheorie

Am Donnerstag, den **09.11.2017** spricht um **15 Uhr c. t.** im Raum S9

Oliver Schön

über das Thema

About (1+2)-dimensional "Schwarzschild" and lower dimensional Relativity

Many concepts that are introduced for (1+3)-dimensional spacetimes have analogon in higher dimensions. In this presentation we will discuss weather the same thing can be said about lower dimensional Relativity. We motivate this analysis by working out some properties of the "Pseudo-Schwarzschild solution", that is, the restriction of the Schwarzschild solution to the equatorial plane. This spacetime behaves quite similar as the higher dimensional Schwarzschild spacetimes, but not completely. We will argue why there cannot be an "exact" Schwarzschild solution in (1+2) dimensions.

Finally, we talk about asymptotical flatness and the ADM-mass in two space dimensions and why those concepts operate differently in lower dimensions.

Hierzu wird herzlich eingeladen.

C. Cederbaum, G. Huisken