



E I N L A D U N G

im Rahmen des Literaturseminars

zum Vortrag

von

Albert Huber

(TU Wien)

über

„Gravitational Shock Waves in stationary Black Hole Spacetimes“

Abstract:

In this talk, the geometric framework of local metric deformations will be discussed with special emphasis on so-called generalized Kerr-Schild deformations. The consideration of precisely these deformations is justified by the fact that they lead to a comparably simple structure of Einstein's field equations, which is demonstrated using the spin-coefficient formalism of Newman and Penrose. Based on the results obtained, it is shown how the field of a gravitational shockwave generated by a massless point-like particle can be calculated at the event horizon of the stationary Kerr-Newman black hole, while specific physical properties of the corresponding class of geometries are discussed in passing.

Zeit: Donnerstag, 17.5.2018, **14.00**

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

gez.: P. Chrusciel, D. Fajman