



EINLADUNG

im Rahmen des Seminars für Mathematische Physik
(Joint TU/UV Theory Seminar)

zum Vortrag

von

Jelle Hartong

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über

„Non-relativistic expansion of general relativity“

Abstract:

I will discuss recent progress in the $1/c$ expansion of general relativity where c is the speed of light. This is an off shell and covariant approximation of general relativity that is similar to the post-Newtonian approximation.

I will show that it provides an action principle for matter coupled Newton-Cartan gravity which on shell is described by torsionless Newton-Cartan geometry.

For certain choices of matter, instead of leading to Newton-Cartan gravity, it rather gives rise to matter coupled Galilean gravity and I will discuss these cases as well.

Finally, time permitting, I will end with some comments about the $1/c$ expansions of the Nambu-Goto and Polyakov actions for strings.

Zeit: Dienstag, 10.12.2019, 13.45 h

Ort: Fakultät für Physik, Erwin-Schrödinger-Hörsaal,
Boltzmannngasse 5, 5. Stock

gez.: S. Fredenhagen, D. Grumiller, C. Zwikel, T. Schimannek