E I N L A D U N G

im Rahmen Literaturseminars

zum Vortrag

von

Albert Huber

(Univ. Vienna)

über

„Quasilocal corrections to Bondi's mass loss formula

and dynamical horizons"

Abstract:
In my talk, a null geometric approach to the quasilocal Brown-York formalism will be used to calculate, within a bounded gravitating physical system, the flux of energy through a dynamical horizon of a non-stationary spacetime.
This is done by varying the total Hamiltonian of the system (bulk part plus boundary part) so as to derive an integral law describing the rate of change of mass and/or radiant energy escaping through the dynamical horizon.
The results obtained in this way, as is shown, lead to previously unrecognized correction terms, including a bulk-to-boundary inflow term that leads to corrective extensions of Einstein's quadrupole formula in the large sphere limit and to quasilocal corrections to Bondi's mass-loss formula, the latter occurring in the null geometric context.
Specific applications in the areas of gravitational wave physics and the theory of tidal heating and deformation effects are discussed.

Zeit: Mittwoch, **25.10.2023**, **14.15 h** VERA **Victor-Franz-Hess-Seminarraum, Hoftrakt, Währinger Straße 17**

https://univienna.zoom.us/j/6540036841?pwd=SytyVkZJZzNyRG9IMm13ejlHeHRRUT09

gez.: P. Chrusciel, D. Fajman