Seminarankündigung

Deformationsquantisierung

Am 15. 1. 2021 spricht um 14 Uhr c.t.

`https://bbb.durates.net/b/ste-2va-uez`

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New geometrical methods in mathematical relativity

This talk presents some new geometric approaches to global behavior of solutions to classical field equations. The results comprise:

- the existence of global solutions for Dirac-Higgs-Yang-Mills Theories (like the standard model) in spacetimes close to Minkowski spacetime in the case of small initial values, via the useful notion of future conformal compactification (joint work with Nicolas Ginoux),

- the existence of maximal Cauchy developments of Dirac-Higgs-Yang-Mills-Einstein theories (e.g. the minimal coupling of the standard model to gravity and its sectors like Einstein-Dirac-Maxwell theory) with the main tool being the Universal Spinor Bundle (joint work with Nikolai Nowaczyk),

- some old and new results about how concentration of energy implies the development of black holes, and the "flatzoomer" method (developped in a joint work with Marc Nardmann) applied in the construction of spacetimes metrics satisfying energy conditions in a given conformal class.

gez. Stefan Waldmann