Deformationsquantisierung

Am 26. 2. 2021 spricht um 14 Uhr c.t.

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

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Asymptotic equivalence of two strict deformation quantizations and applications to the classical limit.

The concept of strict deformation quantization provides a mathematical formalism that describes the transition from a classical theory to a quantum theory in terms of deformations of (commutative) Poisson algebras (representing the classical theory) into non-commutative C^*-algebras (characterizing the quantum theory). In this seminar we introduce the definitions, give several examples and show how quantization of the closed unit 3-ball $B^3 \subset \mathbb{R}^3$ is related to quantization of its smooth boundary (i.e. the two-sphere $S^2 \subset \mathbb{R}^3$.) We will moreover give an application regarding the classical limit of a quantum (spin) system and discuss the concept of spontaneous symmetry breaking (SSB) .

gez. Stefan Waldmann