

Im Oberseminar

Deformationsquantisierung

spricht am **7. 7. 2017 um 14 Uhr c.t.**,

im Seminarraum 00.009 (Physik Ost)

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über das Thema:

G-invariant Hochschild cohomology and existence of a HKR map

In this talk, first some motivation for Hochschild cohomology is given in the context of deformation quantization, and the notion of group invariance of this cohomology is introduced. Applying the usual Hochschild-Kostant-Rosenberg (HKR) isomorphism does not restrict to the G -invariant case without difficulties, leaving the space without immediate geometric interpretation. This and possible solutions will be discussed. Once the restriction of HKR turns out to be meaningful, some language from principal bundle theory will be used to give rise to a geometric understanding of this G -invariant cohomology, which may be highly valuable for reduction of physical systems.

gez. Stefan Waldmann