

Seminarankündigung

Deformationsquantisierung

Am 10. 7. 2020 spricht um 14 Uhr c.t.

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

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Geometric Taylor Formulas on Lie Groups

Classical Taylor expansions are ubiquitous in the mathematical modelling of systems in the natural sciences, which can be described by vector spaces. While on a manifold this still works within an analytic chart, it is not clear how to extend the formulas beyond this local situation. In this talk, we provide two answers to this question for analytic functions on a Lie group. To this end, we first reformulate the local Taylor formula in a geometric fashion. In a second step we globalize the local result to incorporate the geometry of the Lie group. As all methods are elementary differential geometry, we will provide complete proofs. Finally, we draw a connection to the algebras of possibly trivial functions introduced in an earlier talk.

gez. Stefan Waldmann