

Seminarankündigung

Deformationsquantisierung

Am 22. 1. 2021 spricht um 14 Uhr c.t.

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

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The notion of complete filtered L_∞ -algebras

Many problems in deformation theory can be covered by differential graded Lie algebras (DGLA) via the solutions of the Maurer-Cartan (MC) equation modulo gauge action. This is the case for formal Poisson tensors as well as for formal deformations of associative algebras by means of the multivector fields and the Hochschild complex, respectively. However, there are good reasons to consider the broader category of L_∞ -algebras instead of DGLA's. In this talk I will present two definitions for L_∞ -algebras by coalgebraic techniques leading us to different notions of morphisms. The definition of MC elements can directly be transferred to L_∞ -algebras as soon as we guarantee the convergence of series, whereas a generalization of the gauge action requires a bit of work. After establishing these definitions many results on DGLA's can be extended to L_∞ -algebras.

gez. Stefan Waldmann