

Seminarankündigung

## Deformationsquantisierung

**Am 5. 8. 2020 spricht um 14 Uhr c.t.**

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

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### Poisson Structures from Poisson-Lie Groupoids and Embedded Graphs

We consider a surface with boundary and define a Poisson structure by labelling an embedded graph with Poisson data. To each vertex we assign a Poisson-Lie groupoid that is equipped with a classical dynamical  $r$ -matrix. We decorate each edge with a Poisson manifold together with a Poisson action of the groupoids at its start and target vertices. This generalizes Fock and Rosly's Poisson structure, which is used to describe the Poisson structure on the moduli space of flat  $G$ -bundles on the surface. Fock and Rosly's result requires that the Poisson structure on the moduli space is induced by a classical (non-dynamical)  $r$ -matrix. We extend this to the case of a classical dynamical  $r$ -matrix. The Poisson structure on the moduli space is obtained by forming the quotient of our Poisson structure with respect to the groupoid actions at the vertices.

gez. Stefan Waldmann