

Seminarankündigung

## Deformationsquantisierung

**Am 22. 11. 2019 spricht um 14 Uhr c.t.**

Seminarraum SE 30

MAXIMILIAN STEGEMEYER

How to find the right path for the SPD (matrices) and a unique principal connection on the Stiefel manifold.

This talk consists of two parts. First, we apply results on endpoint geodesics to the symmetric positive definite matrices. This is a non-compact symmetric space and we use an embedding that is not the standard embedding. In the second part, a result on principal connections on the Stiefel manifold is presented. The Stiefel manifold is a principal fiber bundle over the Grassmannian and there is a natural transitive left action of  $SO_n$  that is compatible with the principal action. Therefore we study principal fiber bundles with an additional compatible transitive left action. It turns out that there is a unique  $SO_n$ -invariant principal connection on the Stiefel manifold.

gez. Stefan Waldmann