

Announcement

## Seminar on Deformation Quantization and Geometry

**14. 11. 2025 at 14:00 s.t.**

Seminarroom SE 31

HENDRIK SCHARLAU (JMU WÜRZBURG)

### Perturbed Deformation Retracts

The Perturbation Lemma is very helpful in obtaining new Deformation Retracts or Homotopy Equivalence Data. As long as it is not easy at all to find Deformation Retracts, this guides us to a powerful tool if we have already found some Deformation Retract. Because proving the Perturbation Lemma is mainly a long but surprisingly easy calculation, we are able to gain more important results with it than we would expect by the difficulty of this Lemma. This applies in particular to several algebras like the deformation of Lie algebras and algebras of continuous functions, as well as formal deformations.

Invited by Stefan Waldmann