Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

MUΦX
Lehrstuhl X

Announcement

Seminar on Deformation Quantization and Geometry

6. 12. 2024 at 14:00 s.t.

Seminarroom SE 31

Stefan Waldmann (JMU Würzburg)

The Hochschild-Kostant-Rosenberg Theorem

In this talk I will present a new approach to this classical theorem based on two ingredients: first, the van Est isomorphism for (abelian) Lie groups relating the group cohomology to the corresponding Lie algebra cohomology and, second, the global symbol calculus for multidifferential operators based on the usage of a symmetrized covariant derivative. For technical reasons it will be advantageous to formulate the van Est construction in a coalgebraic version. The homological perturbation lemma will then be a decisive tool in relating the various cohomologies.

The work is based on a recent joint work with Marvin Dippell, Chiara Esposito and Jonas Schnitzer.

Invited by Madeleine Jotz