Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

MUΦX
Lehrstuhl

Im Oberseminar

Deformationsquantisierung

spricht am **14.11.2014 um 14 Uhr c.t.,**

im Seminarraum 00.009 (Physik Ost)

Benedikt Hurle

über das Thema:

Generalisations of the Hochschild-Kostant-Rosenberg-Theorem for constant rank maps II

The well known HKR-theorem describes the Hochschild cohomology of the algebra of smooth functions on a manifold $C^\infty(M)$, in fact $\mathrm{HH}^\bullet(C^\infty(M)) \cong \mathfrak{X}^\bullet(M)$, where $\mathfrak{X}^\bullet(M)$ are the multivectorfields on M. The aim of this talk is to generalize this to the situation $N \xrightarrow{p} M$ for two manifolds M and N such that $p(N)$ is a submanifold of M, and compute here the Hochschild-cohomologies $\mathrm{HH}^\bullet(C^\infty(M), C^\infty(N))$ and $\mathrm{HH}^\bullet(C^\infty(M), \mathrm{DiffOp}(N))$, where $C^\infty(N)$ and $\mathrm{DiffOp}(N)$ are considered as $C^\infty(M)$ bimodule using the pullback of p. The main tool for proofing this is the Koszul complex of $C^\infty(M)$.

gez. Stefan Waldmann