Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

MUΦX
Lehrstuhl

Im Oberseminar

Deformationsquantisierung

spricht am **2. 5. 2014 um 10 Uhr c.t.,**

im Seminarraum 00.009 (Physik Ost)

MATTHIAS SCHÖTZ

über das Thema:

A Fréchet-Topology on the Weyl algebra over Hilbert spaces

The Weyl algebra over a Hilbert space $\mathcal{H}$ can be interpreted as a deformation of the symmetric algebra over $\mathcal{H}$, where the usual symmetric tensor product $\vee$ is replaced by a non-commutative product $\star_b$, depending on a bilinear form b.

In this talk, I will present a way to extend the inner product of $\mathcal{H}$ to its symmetric tensor algebra such that the product $\star_b$ becomes continuous in the locally convex topology created by the extension of all continuous inner products on $\mathcal{H}$. It will turn out that under some additional requirements, this topology is the coarsest possible.

gez. Stefan Waldmann