Im Oberseminar

Deformationsquantisierung

spricht am **12. 12. 2013 um 10 Uhr c.t.,**

im Seminarraum 00.009 (Physik Ost)

Simone Gutt

über das Thema:

Dirac operators in a symplectic context

On a symplectic manifold (M, ω), using a Mp^c structure (which always exist) and a Mp^c connection, one can define a symplectic Dirac operator. The Mp^c group is a central extension of the symplectic group analogous to the $Spin^c$ group in Riemannian geometry. We shall speak about invariant Mp^c structures and lifts of some special subgroups of the symplectic group to the group Mp^c. Fixing a positive compatible structure J and an adapted connection, we shall recall the definiton of the symplectic Dirac-Dolbeault operators and give properties concerning the dimension of their kernels. We shall compare the situation with the classical Dirac operators associated to the metric defined by ω and J.

Joint work with Michel Cahen, Laurent La Fuente-Gravy and John Rawnsley

gez. Stefan Waldmann