

Announcement

Seminar on Deformation Quantization and Geometry

27. 10. 2023 at 14:00 s.t.

Seminarroom SE 30

BENEDIKT PFAHLS (JMU WÜRZBURG)

Constraint de Rham Cohomology

In his dissertation Marvin Dippell developed a framework called Constraint Geometry to better study the interplay of reduction and quantization of Poisson manifolds. Important objects of study in it are triples (M, C, D) of a manifold M , a closed submanifold C and a simple distribution D on C called constraint manifolds. In this presentation the focus is on expanding the geometric side of this theory, specifically we will examine the constraint de Rham cohomology of such constraint manifolds. So we will see analogues to important theorems in de Rham theory like the Mayer-Vietoris principle, and analyze the relation of constraint cohomology to other cohomology theories for the spaces M , C and the reduced space.

Invited by Stefan Waldmann