Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

MUΦX
Lehrstuhl

Announcement

Seminar on Deformation Quantization and Geometry

13.11.2026 at 14:00 s.t.

Seminarroom SE 31

Aldo Witte (Universität Hamburg)

The derived category of a generalized complex torus

Homological mirror symmetry, as conjectured by Kontsevich, predicts an equivalence between the Fukaya category of a symplectic manifold (The A-model) and the derived category of coherent sheaves of a mirror complex manifold (The B-model). Generalized complex geometry, as introduced by Hitchin and Gualtieri, provides a framework where complex and symplectic manifolds can be treated on an equal footing. Research in generalized geometry in the last decades has provided strong evidence that there should be a derived category associated to a generalized complex structure unifying the A and B-model, which goes by the name of 'category of GC branes'. In this talk we will define this category for invariant generalized complex structures on tori, using T-duality, deformation quantisation and curved dga's. Joint work with Patrick Antweiler, Vicente Cortés, Julian Holstein and Markus Röser.

Invited by Madeleine Jotz