



Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 27. Juni 2023

17 Uhr, Geom H4

Prof. Nick Sheridan
(University of Edinburgh)

Quantum cohomology as a deformation of symplectic cohomology

Abstract:

Let M be a compact symplectic manifold, and D a normal-crossings symplectic divisor in M . We give a criterion (which can be naturally expressed in terms of the Kodaira dimension of M and log Kodaira dimension of $M \setminus D$, in the context where M and D come from the realm of algebraic geometry) under which the quantum cohomology of M is a deformation of the symplectic cohomology of $M \setminus D$. We will give an idea of what quantum cohomology and symplectic cohomology are. We will also show that the 'skeleton' of $M \setminus D$ has strong symplectic rigidity properties in this context, and explain some conjectures about what happens when our criterion is not satisfied. If time permits we will explain the relationship with mirror symmetry. This is joint work with Strom Borman and Umut Varolgunes.

**Vor dem Vortrag (ab 16.30 Uhr) stehen im Foyer vor Hörsaal H4
Kaffee und Tee bereit.**