

## **Oberseminar Zahlentheorie und arithmetische Geometrie**

## Ziyu Zhang

(Hannover)

## Holomorphic symplectic manifolds among Bridgeland moduli spaces

We consider moduli spaces of semistable complexes on a projective K3 surface with respect to generic Bridgeland stability conditions. Similar to the sheaf case, the smooth ones among them are holomorphic symplectic manifolds, and the 10-dimensional singular ones admit symplectic resolutions. I will explain why these examples of holomorphic symplectic manifolds are all deformation equivalent to the known ones. By generalizing the prominent work of Bayer and Macri, we can also study the birational geometry of the 10-dimensional singular moduli spaces via wall-crossing on the stability manifold. This is a joint work with C.Meachan.

## Donnerstag, 02.06.2016, 12:00 - 13:00, a410

Alle Interessierten sind herzlich eingeladen.