Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 24. 01. 2023

17 Uhr, Geom H4

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(Hermitian)-Yang-Mills connections in higher dimensions

Abstract:
Energy minimizing connections in dimension four (instantons) have played an important role in physics and mathematics since the '70s. More recently, higher dimensional versions of Yang-Mills connections are being used to study manifolds with special holonomy. In the context of complex geometry, solution spaces of these equations are closed related to moduli spaces of holomorphic objects subject to stability conditions.
This talk will partly survey developments in this area. I will also discuss more recent results, such as the existence of suitably singular Hermitian-Einstein metrics on normal projective varieties that are smooth in codimension two. A particular application is a characterization of those sheaves that saturate the Bogomolov-Gieseker inequality.

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