

Oberseminar Geometrie und Topologie

Sommersemester
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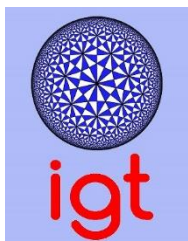
Leibniz Universität Hannover

Topological entropy of automorphisms on algebraic surfaces

5. Juli 2022 – 16.15 Uhr

IGT-Seminarraum 7.530, Pfaffenwaldring 57

Abstract: To any diffeomorphism of a manifold we can associate a real number, called the entropy, which measures how fast its iterates spread out the points of the manifold. In this talk we will investigate the entropy of automorphisms of complex algebraic surfaces, and more specifically of K3 surfaces, which are a special kind of simply-connected 4-manifolds. We will see how the structure of the automorphism group of a K3 surface depends on the presence of automorphisms of positive entropy, and we will apply this machinery to obtain a classification of K3 surfaces with almost-abelian automorphism group. This is joint work in progress with Simon Brandhorst.



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