

Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 16. Juni 2015

17 Uhr s.t., Geom H4

Prof. Dr. Sean M. Keel (University of Texas at Austin)

A canonical global positioning system on a Calabi-Yau manifold

Abstract:

I will explain, in language aimed at a second year graduate student in geometry, my conjecture, joint with Gross, Hacking and Siebert, that a (correctly defined) affine CY manifold has canonical "theta-functions", a canonical basis of the vector space of regular functions, and some of the many applications of our partial results, joint with Kontsevich, to representation theory, Teichmuller theory, Mori theory, and mirror symmetry.

I won't assume any previous knowledge of any of these subjects: If you know what is meant by the order of zero or pole of a meromorphic function along a codimension one submanifold, you know enough to follow the main points of the talk.

Vor dem Vortrag (ab 16.30 Uhr) stehen im Raum 327 Kaffee und Tee bereit.