

Ricci flow: techniques and applications

SPEAKER: KLAUS KRÖNCKE

Faculty of Mathematics, University of Potsdam

Date and Place: Wednesday, May 28 2014, 10:30
Besprechungszimmer, 3rd floor, Faculty of Mathematics
University of Vienna

ABSTRACT

This talk is an introduction to the techniques that are used to study the Ricci flow. We start with discussing certain metrics which evolve particularly simple under it. We introduce Perelman's entropies and explain why the Ricci flow cannot form loops in the space of metrics modulo diffeomorphisms. Finally, we will discuss how the Ricci flow can be used to classify compact three-manifolds with positive Ricci curvature.