

Mathematics Colloquium

Gabriele La Nave

Yeshiva

Kähler-Ricci Flow and Symplectic Reduction

Abstract: We will explain how one can describe the Kähler-Ricci flow on symplectic reductions via a (modified) Monge-Ampère equation on the total space and a backwards heat equation on the moment map.

We will explain how this should be thought of as performing surgery for the Kähler-Ricci flow on Kähler manifolds that arise as quotients via torus actions, derive consequences for the structure of the singularities in such a situation and explain how this fits in when studying the Kähler-Ricci flow on Kähler manifolds with indefinite first Chern class.

Wednesday, December 5

4:00-5:00 pm
204 Smith Hall