

1051-53-121

Zuang-dan Daniel Guan* (zguan@math.ucr.edu), Department of Mathematics, University of California, Riverside, CA 92521. *KE metrics, stability and Ricci flow*. Preliminary report.

I will give some examples of compact Fano manifolds with or without Kähler-Einstein metrics. The existence is exactly the same as a stability. The stability is described by a topological integral inequality. An interesting question is on the formation of singularity of the Ricci flow when the manifolds are not stable, i.e., when the Ricci class does not admit a KE metric. We notice that since the automorphism groups are semisimple, there is no Ricci soliton for these manifolds. (Received August 20, 2009)