

M. Jiang, "Variation of Entropy of SRB measures of Uniformly Hyperbolic Systems"

For uniformly hyperbolic systems, it is well-known that its metric entropy with respect to the SRB measure depends on the system differentiably when the perturbation is sufficiently smooth. We present results on the possible values of the entropy when the system varies. In the Axiom A case, we present the derivative formula for the entropy with respect to the generalized SRB measure and in the dimension-two case, the derivative formula for the Hausdorff dimension of the hyperbolic set.