

Exceptional sets for nonuniformly hyperbolic diffeomorphisms

Katrin Gelfert¹, Sara Campos²

¹ IM-UFRJ ² DM-UFJF

For a surface diffeomorphism, we study exceptional sets, that is, the set of points whose orbits do not accumulate at a given “target set”. We show that if the fractal dimension of the target is sufficiently “small” then the fractal dimension of the exceptional set is “full”. Particular consequences occur when there is some *a priori* defined hyperbolic structure and, for example, if there exists an SRB measure.

References

- [1] S. CAMPOS, K. GELFERT, *Exceptional sets for nonuniformly hyperbolic diffeomorphisms*.