

TRIMODAL WEAKLY BLENDING MAPS WITH POSITIVE TOPOLOGICAL ENTROPY

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Abstract

In this work, we describe the structure of a class H of trimodal self maps on the compact real interval I , we prove if the set $w_f(x)$ is infinite and f is not injective on $w_f(x)$ then f is weakly blending. Also, we show these maps have positive topological entropy and we prove these maps are weakly blending. Finally, we prove this class above H contains a C^∞ map.

Key Words : *Maps of the interval, Trimodal map, Weakly blending map, Topological entropy, Chaotic dynamic.*

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