

CHAIN-REGULAR AND REGULAR COMPONENTS OF THE WANDERING SET OF SURFACE  
HOMEOMORPHISMS

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Regular components of the wandering set of surface homeomorphisms were introduced by Birkhoff [1, 2]. With the emergence of the chain recurrent set theory introduced by Conley [3] for flows and adapted for discrete dynamical systems by Franks and Hurley [4, 5] we can define an analog of regular components of the wandering set for the set of chain-regular points (points that are not chain recurrent) as the set of points that divide an attractor-repeller pair.

We study the topology of chain-regular components of surface homeomorphisms and show that it is in fact different from the topology of regular components of the wandering set.

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