

Graphs of T-unimodal maps

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Following the ideas of Smale, Conley, and Norton, we show how the dynamics of a (discrete) dynamical system can be encoded into a graph. The nodes and edges of such a graph are given by a natural equivalence relation on the system's chain-recurrent set. Recently, De Leo and Yorke described the graphs of S-unimodal maps. We extend their result to non-differentiable unimodal maps that share similar properties with tent maps; they have no wandering intervals or attracting periodic orbits, and they are not infinitely renormalizable.

(joint work with Roberto De Leo)