SHADOWING IN PARAMETERIZED IFS

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Dedicated to Professor Ioan A. Rus on the occasion of his 70th birthday

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Abstract. The Shadowing Property is stated for set-valued dynamical systems, generated by parameterized IFS, which are uniformly contracting, or uniformly expanding, or products of such ones. We also prove that a parameterized IFS with "condensation", consisting of an affine function and a constant compact-valued multi-function, has the Shadowing Property if and only if the affine function is a contraction.

Key Words and Phrases: set-valued dynamical systems, iterated function systems, shadowing.

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