

## A GENERALIZATION OF ISTRĂȚESCU'S FIXED POINT THEOREM FOR CONVEX CONTRACTIONS

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**Abstract.** In this paper we prove a generalization of Istrățescu's theorem for convex contractions. More precisely, we introduce the concept of iterated function system consisting of convex contractions and prove the existence and uniqueness of the attractor of such a system. In addition we study the properties of the canonical projection from the code space into the attractor of an iterated function system consisting of convex contractions.

**Key Words and Phrases:** Convex contractions, fixed points, iterated function systems consisting of convex contractions.

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