

ON ASYMPTOTICALLY NONEXPANSIVE MAPPINGS WITH NON-CONVEX DOMAINS

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Abstract. In this paper, we prove the existence of periodic points of asymptotically nonexpansive mappings defined on non-convex domains in uniformly convex Banach spaces. We also introduce the notion of firmly asymptotically nonexpansive mappings and prove the existence of fixed points of such mappings with non-convex domains.

Key Words and Phrases: Asymptotically nonexpansive mapping, fixed point, periodic point.

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