# COMMON FIXED POINTS FOR GENERALIZED CONTRACTIONS IN UNIFORM SPACES ENDOWED WITH A GRAPH

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**Abstract.** In this paper, we will define a new kind of generalized contractions to establish some common fixed point theorems for self-mappings on Hausdorff uniform spaces endowed with a graph. This new notion enables us to extend some known results in the literature. We also show that our results can be applied to a homotopy theorem. Related examples are also given to support our main results.

**MSC 2010.** Primary: 47H10; Secondary: 47H9,54E15, 05C40, 54H25.

**Key words.** Connectivity, fixed points, graph, uniform spaces.

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