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EXPANSIVE FIXED POINT RESULTS IN SUPER METRIC SPACES

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Abstract: Super Metric Spaces are a ground-breaking generalization of metric spaces that were recently developed by Karapinar and Khojasteh (Filomat, in press). In this paper, we initiate the study of expansive fixed points in the context of the supermetric spaces. Our results may open the door to more expansive fixed point results in a different direction.

Keywords and Phrases: Expansive mapping, metric space, fixed point, common fixed point.

 $\textbf{2020 Mathematics Subject Classification:} \ 54\text{H}25,\ 47\text{H}10,\ 54\text{E}50.$

1. Introduction and Definitions

With the formulation of the metric fixed point by renowned mathematician Stefan Banach [6], fixed point theory has gained prominence as a research area. The fixed point theory has been the subject of numerous theoretical and practical study. Essentially, there are two widely accepted theories about how to advance the metric fixed point: the first is changing (weakening) the constraints on the mapping of contraction, and the second is altering the abstract structure. Metric spaces have already seen a number of generalisations and extensions.