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FIXED POINTS FOR W-CONTRACTIVE OR W-EXPANSIVE MAPS IN UNIFORM SPACES: TOWARD A UNIFIED APPROACH

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Abstract. A simple condition on the functions $\varphi : \mathbb{R}^+ \to \mathbb{R}^+ = [0, +\infty)$ allows to establish results on fixed and coincidence points for contractive (when $\varphi(t) < t$ for all $t > 0$)or expansive (provided $\varphi(t) > t,\ t > 0$) maps with respect to a w-distance. These generalize recent results of different people, including the authors of the present paper. As in a previous work, an attempt is made toward a unification of the point of view in contractions and expansions.

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