FIXED POINTS FOR COMMUTATIVE FAMILIES OF MAPPINGS

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ABSTRACT. One of the most celebrated results in Metric Fixed Point Theory was given by R. Bruck [1] who proved that the fixed points set of a nonexpansive mapping \( T : C \rightarrow C \) is a nonexpansive retract of \( C \) whenever \( C \) is a weakly compact convex subset of the space \( X \) which has “nice” properties with respect to the existence of fixed point (for instance normal structure). As a consequence of the investigation of the properties of nonexpansive retracts, Bruck [2] proved the existence of fixed points for a commuting family of nonexpansive mappings. In this talk we will show some applications and extensions to these results.

REFERENCES