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	النقاط الثابتةللتطبيقات غير التمددية في الفضاء المحدب محليًا

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Abstract : In the setting of metric spaces, Caristi obtained a useful fixed point theorem which extends the well-known Banach Contraction Principle. While, Cain and Nashed extended this classical principle to Hausdorff locally convex spaces. Recently, Cammaroto et al. extended Caristis theorem to the setting of Hausdorff locally convex spaces. In this thesis, we study some known fixed point results for P–contraction and P–nonexpansive self and non-self maps. In particular, we prove some results on the existence of fixed points for singlevalued P–nonexpansive maps, generalizing the corresponding fixed point results of Taylor, Anderson et al. and Su and Sehgal. Moreover, we present some results on best approximation due to Sahney et al. and Singh. Also, we study the existence of fixed points for multivalued P–contraction and P–nonexpansive self and non-self maps due to Su and Sehgal and many others. Finally, applying the Caristis theorem for Hausdorff locally convex spaces, we prove some new results on the existence of fixed points for compact and non-compact valued maps. These results extend the known results in the literature

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