

Contents

1	Introduction	1
2	σ-Continuous and Co-σ-continuous Maps	13
2.1	σ -Continuous and σ -Slicely Continuous Maps	13
2.2	Co- σ -continuous Maps	23
2.3	P-Maps	28
2.4	Co- σ -continuity of Maps Associated to PRI and M-Basis	31
2.5	Co- σ -continuity of the Operator of Haydon in $C(\Upsilon)$, Υ a Tree	35
2.6	Co- σ -continuity in Weakly Countable Determined Banach Spaces	38
2.7	Co- σ -continuous Maps in $C(K)$. The Case of the Compact of Helly.	40
3	Generalized Metric Spaces and Locally Uniformly Rotund Renormings	49
3.1	Discreteness and Network Conditions	49
3.2	Fragmentability Conditions	53
3.3	LUR Conditions for Pointwise Convergence Topologies	58
3.4	From the Linear to the Nonlinear Transfer Technique	64
4	σ-Slicely Continuous Maps	73
4.1	Examples	73
4.2	Joint σ -Slicely Continuity and Characterization of σ -Slicely Continuous Maps with Values in a Metric Space	81
4.3	Characterization of σ -Slicely Continuous Maps with Values in a LUR Normed Space	95

5	Some Applications	101
5.1	Three Space Property for LUR Renorming	101
5.2	The Weakly Countably Determined Case	103
5.3	Product of σ -Slicely Continuous Maps	104
5.4	Totally Ordered Compacta	111
6	Some Open Problems	117
6.1	More on the Nonlinear Transfer Technique for Renorming	117
6.2	Renormings of $C(K)$ Spaces	123
6.3	Measures of Non Compactness	128
	References	131
	Index	141