

Collective Fixed Points And Maximal Elements With Applications To Abstract Economies

Lin, LH; Ansari, QH

**ACADEMIC PRESS INC ELSEVIER SCIENCE, JOURNAL OF MATHEMATICAL
ANALYSIS AND APPLICATIONS; pp: 455-472; Vol: 296**

King Fahd University of Petroleum & Minerals

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Summary

In this paper, we first establish collective fixed points theorems for a family of multivalued maps with or without assuming that the product of these multivalued maps is Φ -condensing. As an application of our collective fixed points theorem, we derive the coincidence theorem for two families of multivalued maps defined on product spaces. Then we give some existence results for maximal elements for a family of L-S-majorized multivalued maps whose product is Φ -condensing. We also prove some existence results for maximal elements for a family of multivalued maps which are not L-S-majorized but their product is Φ -condensing. As applications of our results, some existence results for equilibria of abstract economies are also derived. The results of this paper are more general than those given in the literature. (C) 2004 Elsevier Inc. All rights reserved.

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For pre-prints please write to: majlin@math.ncue.edu.tw