

ON THE GLOBAL BIFURCATION FOR SOLUTIONS OF LINEAR FREDHOLM INCLUSIONS WITH CONVEX-VALUED PERTURBATIONS

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Abstract. We apply the topological degree theory for compact multivalued operators to study the global structure of solutions for an one-parameter family of inclusions containing a linear Fredholm operator, a nonlinear map and a convex-valued multimap.

Key Words and Phrases: Global bifurcation, Fredholm operator, multivalued map, topological degree, bifurcation index, discontinuous nonlinearity.

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