Dedicated to Professor Ion PĂVĂLOIU on his 60th anniversary

A TOPOLOGICAL DEGREE FOR A*-PROPER MAPPINGS ACTING FROM A BANACH SPACE INTO ITS DUAL

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Abstract. In this paper we define a topological degree for a class of operators $T : X \to X^*$, where X is a separable Banach space. This class generalizes the class of mappings of type (S_+). We define a projectionally complete scheme for (X, X^*). We use the Browder-Petryshyn method and Galerkin approximations.