

1125-47-2451

Dhruba R. Adhikari* (dadhikar@kennesaw.edu), 1100 S. Marietta Pkwy, Math Building - Bldg. D, Marietta, GA 30060. *On the Uniqueness of Topological Degrees for Densely Defined Mappings Involving Variants of (S_+) Operators*. Preliminary report.

Let X be a separable reflexive Banach space, G a bounded open subset of X , and L a dense linear subspace of X . The uniqueness of the topological degree, $d(A, G, 0)$, for mappings $A : X \supset D(A) \rightarrow X^*$ satisfying Condition $(S_+)_L$ and invariant under certain homotopy is established. The existence of such a topological degree is first established by Kartsatos and Skrypnik, and later, by Berkovits by using a different approach to construct the degree. (Received September 20, 2016)