

On Compactness of similarity orbits of norm-attainable, Operators

**P. O. Mogotu, N.B. Okelo and Omolo ongati,
Jaramogi Oginga Odinga University of Science and Technology, Kenya.**

The notion of compactness plays an important role in analysis. It has been extensively discussed on both metric and topological spaces. Various properties of compactness have been proved under the underlying spaces. However, if we consider these sets to be from similarity orbits of norm-attainable operators, little has been done to investigate their compactness. In this paper, we introduce the concept of compactness of similarity orbits of norm-attainable operators in respect to invariant topological spaces and investigate their properties.

Keywords: Similarity orbits; Invariant subsets; Compactness; Topological space.