

ON DENTABLE SETS AND MAPPINGS

Owuor, J¹, Okelo, B², Owino, J³, & Kinyanjui, J⁴Jaramogi Oginga Odinga University of Science and Technology¹²³,
Kirinyaga University, KENYA⁴**Correspondence:** - josephowuorowino@gmail.com**ABSTRACT**

Characterizations of properties of operators in a Banach space setting have been done over many years with interesting results obtained. Dentability of sets and norm-attainable mappings is one of the important properties that have been considered. Most researchers have worked on dentable sets with regard to density of norm-attainable operators. We characterize dentable sets and mappings. This work establishes a link between measure theory, norm-attainability and dentability with the help of Radon-Nikodým Property. It also improves the understanding of optimization problems at a deeper level.

Keywords: *Dentability, Density, Norm-Attainable Class, Optimization, and Norm-attainability.*