

1167-47-277

Daniel Akech* (daniel.akech@cgu.edu), 101 Bucknell ave, 101 Bucknell ave, Claremont, CA 91711. *Characterization of compact operators and an extension to Q -Compact operators.*

This talk presents a characterization of compact operators on Banach spaces, due to Terzioğlu, which relies on a characterization of compact sets in a Banach space due to Grothendieck and Schauder's Theorem on compact operators, which says that an operator between Banach spaces is compact if and only if its adjoint is compact. As an application, Terzioğlu's Theorem allows for representations of compact maps by using a compact map factorization through the space c_0 . The talk concludes with Aksoy's extension of Terzioğlu's theorem to characterize compact operators for Q -compact maps. (Received March 09, 2021)