

Strongly compact operators

Victor Lomonosov, Kent State University, USA

A linear operator T in a Banach space is strongly compact if the unit ball of the algebra, generated by this operator is compact in the strong operator topology. A linear operator T is essentially normal if its commutator with the dual operator is compact.

Theorem. Suppose that an essentially normal operator T and its dual operator both are not strongly compact. Then the operator T is non-transitive.