k-bitransitive and compound operators on Banach spaces

ABSTRACT

In this this paper, we introduce new classes of operators in complex Banach spaces, which we call k-bitransitive operators and compound operators to study the direct sum of diskcyclic operators. We create a set of sufficient conditions for an operator to be k-bitransitive or compound. We give a relation between topologically mixing operators and compound operators. Also, we extend the Godefroy-Shapiro Criterion for topologically mixing operators to compound operators.