Abstract

We consider the almost similarity property which is a new class in operator theory and was first introduced by A. A. S. Jibril. We establish that almost similarity is an equivalence relation. Some results on almost similarity and isometries, compact operators, hermitian, normal and projection operator are also shown. By characterization of unitary equivalence operators in terms of almost similarity we prove that operators that are similar are almost similar. We also claim that quasi-similarity implies almost similarity under certain conditions (i.e. if the quasiaffinities are assumed to be unitary operators). Furthermore, a condition under which almost similarity of operators implies similarity is investigated. Lastly, we show that two bounded linear operators of a Banach algebra on a Hilbert space are both completely nonunitary if they are contractions which are almost similar to each other.