GENERALIZED BICIRCULAR PROJECTIONS VIA RANK PRESERVING MAPS ON THE SPACES OF SYMMETRIC AND ANTISYMMETRIC OPERATORS

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Abstract. We study several related maps from the space of symmetric (respectively, antisymmetric) operators, acting on a complex Hilbert space, to itself: rank preserving linear maps (more precisely, maps preserving rank one operators in the symmetric case, and maps preserving rank two operators in the antisymmetric case), surjective linear isometries and generalized bicircular projections.


Keywords and phrases: Generalized bicircular projections, rank preserving maps, symmetric operators, antisymmetric operators.

REFERENCES