SOME REVERSES OF THE CAUCHY—SCHWARZ INEQUALITY FOR COMPLEX FUNCTIONS OF SELF–ADJOINT OPERATORS IN HILBERT SPACES

S. S. DRAGOMIR, M. S. MOSLEHIAN AND Y. J. CHO

Abstract. We give some ratio and difference reverses of the Cauchy–Schwarz inequality for complex functions of self-adjoint operators in Hilbert spaces, under suitable assumptions for the involved operators. Several examples for particular functions of interest are provided as well.


Keywords and phrases: Self-adjoint operators, reverse of the Cauchy–Schwarz inequality, spectral representation, functions of self-adjoint operators.

REFERENCES


