

## IMPROVED REVERSE ARITHMETIC–GEOMETRIC MEANS INEQUALITIES FOR POSITIVE OPERATORS ON HILBERT SPACE

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*Abstract.* In this paper, employing induction on the given reverse Young inequalities, we obtain more reverse arithmetic-geometric means inequalities for two positive operators. Concretely, following the main result from [13] we obtain reverse ratio type inequalities and reverse difference type inequalities of the refined arithmetic-geometric means inequality for two positive operators on a Hilbert space.

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