HÖLDER TYPE INEQUALITIES FOR MATRICES

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Abstract. We discuss Hölder type inequalities involving \((A^p + B^p)^{1/p}\) for positive semi-definite matrices \(A, B\). Matrix or trace inequalities of Hölder type as well as weak majorizations of similar type are obtained. Also we give counter-examples for expected Hölder type inequalities.


Key words and phrases: Positive semi-definite matrices, Hölder inequality, trace inequalities, weak majorization, Oppenheim inequality.

REFERENCES

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