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EXTENSIONS OF INEQUALITIES INVOLVING KANTOROVICH CONSTANT

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Abstract. In this paper, two methods of extending inequalities involving Kantorovich constant are presented. An inequality of Mićić et al. [Linear Algebra Appl., **318** (2000), 87–107] on positive linear maps and geometric mean of positive definite matrices is extended to arbitrary matrices having accretive transformation. A result of Dragomir [JIPAM 5 (3), Art.76, 2004] is applied to give new sufficient conditions for Greub-Reinboldt's inequality to hold.

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