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ESTIMATES FOR ABSOLUTE VALUES OF MATRIX FUNCTIONS*

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Abstract. Sharp estimates for the absolute values of entries of matrix valued functions of finite and infinite matrices are derived. These estimates give us bounds for various norms of matrix valued functions. Applications of the obtained estimates to differential equations are also discussed.

Key words. Matrix valued function, Estimate for entries, Estimate for norm.

AMS subject classifications. 15A54, 15A60.

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