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BOUNDS ON THE SPECTRAL RADIUS OF HADAMARD PRODUCTS OF POSITIVE OPERATORS ON ℓ_P-SPACES[*]

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Abstract. Recently, K.M.R. Audenaert (2010), and R.A. Horn and F. Zhang (2010) proved inequalities between the spectral radius of Hadamard products of finite nonnegative matrices and the spectral radius of their ordinary matrix product. We will prove these inequalities in such a way that they extend to infinite nonnegative matrices A and B that define bounded operators on the classical sequence spaces ℓ_p.

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