

ON SOME INEQUALITIES FOR THE APPROXIMATION NUMBERS IN BANACH ALGEBRAS

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Communicated by M. Mathieu

ABSTRACT. In this paper, we generalize some inequalities for the approximation numbers of an element in a normed (Banach) algebra X and, as an application, we present inequalities for the quasinorms of some ideals defined by means of the approximation numbers.

In particular, if $X = L(E)$ - the algebra of linear and bounded operators $T : E \rightarrow E$, where E is a Banach space, we obtain inequalities for certain quasinorms of operators.

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Date: Received: Mar 5, 2018; Accepted: Apr. 19, 2018.

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\diamond Advance publication – final volume, issue, and page numbers to be assigned.

2010 *Mathematics Subject Classification.* Primary 47A63; Secondary 47A58, 46H10.

Key words and phrases. Banach algebra, ideal, approximation number.

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