

## SCALAR APPROXIMANTS OF QUADRATIC OPERATORS WITH APPLICATIONS

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*Abstract.* Among other results, we find the best scalar approximant of a quadratic operator with respect to the numerical radius and the operator norm. We use these results to give estimates for the numerical radii of products and commutators of quadratic operators.

*Mathematics subject classification (2010):* Primary 47A12, Secondary 47A30, 47A63.

*Keywords and phrases:* Numerical range, quadratic operator, scalar approximant.

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