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Dedicated to Professor Emeritus Ioan A. Rus on the occasion of his 80^{th} anniversary

A comparison of some fixed point iteration procedures by using the basins of attraction

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ABSTRACT.

Several iterative processes have been defined by researchers to approximate the fixed points of various classes operators. In this paper we present, by using the basins of attraction for the roots of some complex polynomials, an empirical comparison of some iteration procedures for fixed points approximation of Newton's iteration operator. Some numerical results are presented. The Matlab m-files for generating the basins of attraction are presented, too.

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