

AN INTERMEDIATE NEWTON-KANTOROVICH METHOD
FOR SOLVING NONLINEAR EQUATIONS

IOANNIS K. ARGYROS and SANJAY K. KHATTRI

Abstract. We provide a semilocal convergence analysis for an easy to implement intermediate Newton-Kantorovich method in order to approximate a locally unique solution of a nonlinear equation in a Banach space setting.

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Key words. Newton-Kantorovich type methods, Banach space, majorizing sequence, nonlinear equation, Fréchet-derivative.

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*Cameron University
Department of Mathematical Sciences
Lawton, OK 73505, USA
E-mail: iargyros@cameron.edu*

*Stord/Haugesund University College
Department of Engineering
Haugesund, Norway
E-mail: sanjay.khattri@hsh.no*