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   Autore   Ezquerro Fernández José Antonio

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                        Miguel Ángel Hernández Verón

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   Nota di contenuto   The degree of logarithmic convexity -- The Newton method and
                        convexity -- Accelerations of the Newton method -- Newton-like
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   Sommario/riassunto   This monograph examines a variety of iterative methods in Banach
                        spaces with a focus on those obtained from the Newton method.
                        Together with the authors' previous two volumes on the topic of the
                        Newton method in Banach spaces, this third volume significantly
                        extends Kantorovich's initial theory. It accomplishes this by
                        emphasizing the influence of the convexity of the function involved,
                        showing how improved iterative methods can be obtained that build
                        upon those introduced in the previous two volumes. Each chapter
                        presents theoretical results and illustrates them with applications to
                        nonlinear equations, including scalar equations, integral equations,
                        boundary value problems, and more. Convexity in Newton's Method will
                        appeal to researchers interested in the theory of the Newton method as
                        well as other iterative methods in Banach spaces.