A family of third order Steffensen's methods on Banach spaces

A family of third order generalized Steffensen's type methods is studied. The main advantage of these methods is they do not need evaluate any derivative. A convergence theorem in Banach spaces is analyzed. Finally, some preliminary numerical results are presented.

Key Words. Nonlinear equations in Banach spaces, third-order iterations, Steffensen's methods.

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