

عنوان مقاله:

A New Two-stage Iterative Method for Linear Systems and Its Application in Solving Poisson's Equation

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خلاصه مقاله:

In the current study we investigate the two-stage iterative method for solving linear systems. Our new results shows which splitting generates convergence fast in iterative methods. Finally, we solve the Poisson-Block tridiagonal matrix from Poisson's equation which arises in mechanical engineering and theoretical physics. Numerical computations are presented based on a particular linear system, which clearly show the reliability and efficiency of the presented algorithm.

کلمات کلیدی:

Two stage iterative method, Splitting, Poisson's equation, Spectral radius

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