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**Current issues in the development of the theory of iterative methods with Chebyshev acceleration.** (English. Russian original) [Zbl 0875.65052](#)

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Summary: The paper briefly reviews the main issues of efficiency analysis of iterative algorithms with Chebyshev polynomial acceleration and examines the computational stability of solutions of problems with ill-conditioned matrices.

**MSC:**

**65F10** Iterative numerical methods for linear systems

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**Keywords:**

iterative algorithms; Chebyshev polynomial acceleration; computational stability; ill-conditioned matrices

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