

**Parallel Solution to the System of Linear Algebraic Equations  
with Three-Diagonal Matrix and Expansion  
of Characteristic Polynom**

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**Abstract:** The paper presents parallel schemes of solution to the systems of linear algebraic equations with three-diagonal matrix and expansion of its characteristic polynom. Parallel solution to three-diagonal system is implemented with time complexity  $T(n) = O(\log n)$ , coefficients of characteristic polynom are calculated with the value  $T(n^2) = O(\log_2^2 n)$ .