STABILITY ANALYSIS OF FAST TOEPLITZ LINEAR SYSTEM SOLVERS

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Abstract

We present a numerical stability analysis of the Bareiss and Levinson algorithms for solving a symmetric positive definite Toeplitz system of linear equations.

Comments

Only the Abstract is given here. The full report appeared as [1]. For a revision, see [2].

References

1. A. W. Bojanczyk, R. P. Brent and F. R. de Hoog, *Stability Analysis of Fast Toeplitz Linear System Solvers*, Report CMA-MR17-91, Centre for Mathematical Analysis, ANU, August 1991, 23 pp. rpb126tr.
2. A. W. Bojanczyk, R. P. Brent, F. R. de Hoog, and D. R. Sweet, "On the stability of the Bareiss and related Toeplitz factorization algorithms", *SIAM J. Sci. Computing*, to appear. rpb144.

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