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

- 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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