

Publications by Bo Kågström.

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All publications are listed in reversed chronological order under each heading.

BOOKS

- [1] R. Ciegis, D. Henty, B. Kågström, and J. Zilinskas, editors. *Parallel Scientific Computing and Optimization—Advances and Applications*. Springer Optimization and Its Applications, Vol. 27. Springer, 2009.
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- [3] B. Kågström, J. Dongarra, E. Elmroth, and J. Wasniewski, editors. *Applied Parallel Computing: Large Scale Scientific and Industrial Problems*. Lecture Notes in Computer Science, LNCS 1541. Springer-Verlag, Berlin, 1998.
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- [5] B. Adlerborn, B. Kågström, and D. Kressner. A Parallel QZ Algorithm for Distributed Memory HPC Systems. Report UMINF 14.03 (preprint), Dept. Computing Science, Umeå University, S-901 87 , Umeå.
- [6] A. Dmytryshyn and B. Kågström. Orbit Closure Hierarchies of Skew-Symmetric Matrix Pencils. Report UMINF 14.02 (preprint), Dept. Computing Science, Umeå University, S-901 87 , Umeå.
- [7] R. Granat, B. Kågström, D. Kressner, and M. Shao. Parallel Library Software for the Multishift QR Algorithm with Aggressive Early Deflation. Report UMINF-12.06, Dept. of Computing Science, Umeå University, SE-901 87 Umeå, Sweden, revised Nov. 2013.

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- [10] A. Dmytryshyn, B. Kågström, and V. Sergeichuk. Skew-symmetric matrix pencils: Codimension counts and the solution of a pair of matrix equations. *Linear Algebra Appl.*, 438(8):3375–3396, 2013.

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SCIENTIFIC SOFTWARE

Several of the publications have also resulted in state-of-the-art scientific and library software that is publicly available (e.g., in Collected Algorithms of ACM, NETLIB: GEMM-based Level 3 BLAS, JNF and GUPTRI, RECSY, SCASY, LAPACK, ScaLAPACK-style routines, SLICOT, StratiGraph). See a selection below:

- [132] StratiGraph: Computation and display of the stratification of Jordan and Kronecker structures. See <http://www.cs.umu.se/forskning/forskargrupper/matrix-computations/stratigraph/>.
- [133] RECSY - High Performance library for Sylvester-type matrix equations. See <http://www8.cs.umu.se/research/parallel/recsy>.
- [134] SCASY - ScaLAPACK-style solvers for Sylvester-type matrix equations. See <http://www8.cs.umu.se/research/parallel/scasy>.
- [135] PxSEQR: Nonsymmetric eigenvalue problem—parallel library software in ScaLAPACK 2.0.0. See <http://netlib.org/scalapack/scalapack-2.0.0.html>.