

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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- [5] Fred Gustavson, Lars Karlsson, and Bo Kågström. Parallel and cache-efficient in-place matrix storage format conversion. *ACM Trans. on Math. Software* (submitted), February 2010. (Also published as Report UMINF 10.05).
- [6] R. Granat and B. Kågström. A Novel Parallel QR Algorithm for Hybrid Distributed Memory HPC Systems. *SIAM J. Scientific Computing* (submitted), 2009. (Also as Lapack Working Note LAWN 216).

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- [7] R. Granat and B. Kågström. Parallel solvers for Sylvester-type matrix equations with applications in condition estimation, Part i: Theory and algorithms. Feb. 2010. *ACM Trans. Math. Software* (accepted).
- [8] R. Granat and B. Kågström. Algorithm XXX: The SCASY software library – parallel solvers for Sylvester-type matrix equations with applications in condition estimation, Part II. Feb. 2010. *ACM Trans. Math. Software* (accepted).
- [9] S. Gusev, S. Johansson, B. Kågström, A. Shiriaev, and A. Varga. A numerical evaluation of solvers for the periodic Riccati differential equation. *BIT*, 2010. (accepted).
- [10] Fred Gustavson, Lars Karlsson, and Bo Kågström. Distributed SBP Cholesky factorization algorithms with near-optimal scheduling. *ACM Trans. on Math. Software*, 36(2):11:1–11:25, March 2009. (Also published as Report UMINF 07.19 and IBM Research Report RC24342).

- [11] J. Tångrot, B. Kågström, and U.H. Sauer. Accurate Domain Identification with Structure-Anchored Hidden Markov Models, saHMMS. *Proteins: Structure, Function, and Bioinformatics*, 76(2):343–352, 2009. Published Online: Dec 11 2008, DOI: 10.1002/prot.22349.
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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).

- [115] RECSY - High Performance library for Sylvester-type matrix equations. See <http://www8.cs.umu.se/research/parallel/recsy>.
- [116] SCASY - ScaLAPACK-style solvers for Sylvester-type matrix equations. See <http://www8.cs.umu.se/research/parallel/scasy>.