A Bibliography of Publications of Iain S. Duff

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Abstract

This bibliography records publications of Iain S. Duff.

Title word cross-reference

A^{-1} [ADLR15]. **LU** [DD92a, DD90b, DD91]. **QR** [ADP94]. LDL^T [ADGP07, DHL20]. LU [DD94a, DD97b]. $O(n^{1/2}\tau)$ [DW88]. P^4 [DAGR87, ADGR90]. P^5 [DAGR87, ADGR90]. QR [ADP96].

1 [DR82a, Duf82b, Duf82c, Duf84g]. **10P** [ADD89a, ADD92, DD88, DD89]. **11th** [Duf81i]. **14th** [Ame94]. **15th** [GW94]. **1978** [DS79]. **1979** [GL80]. **1981** [Hen82, TH82, Wat82]. **1982** [PR83]. **1983** [ESY84, Kow84]. **1984** [DR85a]. **1986** [IP87, PA88]. **1987** [Duf88c]. **1988** [CRQR89, Duf89f, ES89]. **1989** [Ano89, DG89, DMSV90, EJP90]. **1990** [Duf91b]. **1991** [Ano91, FF93]. **1993** [Duf94a, GW94]. **1994** [MC95]. **1995** [Duf96a, PB96]. **1996** [DGDG97a]. **1997** [Duf98b]. **1999** [Duf00a]. **1st** [DFT95, HPP88].

2 [ADD89a, ADD92, DD87a, DD88, DD89, DD90a, DD90b, DD91, Duf88b, DV98a]. **200/VF** [DD88, DD89]. **2000** [ACM00, vdVDE+02]. **2001** [Ano01, Duf02a]. **2002** [vdVDE+03]. **2003** [Duf04b]. **2008** [BBD+11, TCJ+10]. **2010** [TBC+11]. **2e** [AG80]. **2nd** [AG80, BBD+11, DR85a].

3 [DDP94]. **3090** [ADD89a, ADD92, DD88, DD89, DD90a]. **3090-200** [DD88, DD89]. **3090-200/VF** [DD88, DD89]. **31-September** [ABD+99].

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primal [DM11]. **primal-mixed** [DM11].
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transformations [DR75]. **Transversal**
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References

Amestoy:1999:EPP

[ABD$^+$99] Patrick Amestoy, Philippe
Berger, Michel Daydé, Iain
Duff, Valérie Frayssé, Luc Gi-
raud, and Daniel Ruiz, editors.
*Euro-Par'99 parallel process-
ing: 5th International Euro-Par
Conference, Toulouse, France,
August 31-September 3, 1999:
Proceedings*, volume 1685 of
*Lecture Notes in Computer Sci-
ence.* Springer-Verlag, Berlin,

Germany / Heidelberg, Germany / London, UK / etc., 1999. CODEN LNCSD9. ISBN 3-540-66443-2. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.58 .I553 1999. URL `http://link.springer-ny.com/link/service/series/0558/tocs/t1685.htm`; `http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=1685.`

Arioli:1993:CSD

[ACD⁺93] M. Arioli, T. F. Chan, Iain S. Duff, N. I. M. Gould, and J. K. Reid. Computing a search direction for large-scale linearly-constrained nonlinear optimization calculations. Report RAL-93-066 and TR-PA-93-34, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, 1993. ???? pp.

Alleon:2003:EPI

[ACD⁺03] G. Alléon, B. Carpentieri, I. S. Duff, L. Giraud, E. Martin, and G. Sylvand. Efficient parallel iterative solvers for the solution of large dense linear systems arising from the boundary element method in electromagnetism. Report TR/PA/03/65, CERFACS, Toulouse, France, 2003. ???? pp.

ACM:2000:SHP

[ACM00] ACM, editor. *SC2000: High Performance Networking and Computing. Dallas Convention Center, Dallas, TX, USA,* *November 4–10, 2000.* ACM Press and IEEE, New York, NY 10036, USA and 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000. ISBN ???? LCCN QA76.88. URL `http://www.sc2000.org/proceedings/info/fp.pdf.`

Amestoy:1989:VMM

[AD89] Patrick R. Amestoy and Iain S. Duff. Vectorization of a multiprocessor multifrontal code. *The International Journal of Supercomputer Applications*, 3 (3):41–59, September 1989. CODEN IJSAE9. ISSN 0890-2720. URL `http://journals.sagepub.com/doi/pdf/10.1177/109434208900300303.`

Arioli:1990:ETL

[AD90] Mario Arioli and Iain S. Duff. Experiments in tearing large sparse systems. In Cox and Hammarling [CH90], pages 207–226. ISBN 0-19-853564-3. LCCN QA297 .R435 1990. US$75.00. Based on papers from a conference in honour of the late James Hardy Wilkinson (died Sunday 5th October 1986) held at National Physical Laboratory, Teddington, Middlesex, UK, 8th–10th July 1987.

Amestoy:1993:MMI

[AD93] Patrick R. Amestoy and Iain S. Duff. Memory management issues in sparse multifrontal methods on multiprocessors. *The International Journal of*

Supercomputer Applications, 7 (1):64–82, 1993. CODEN IJSAE9. ISSN 0890-2720.

Amestoy:1994:MPP

[AD94] P. R. Amestoy and Iain S. Duff. MUPS: a parallel package for solving sparse unsymmetric sets of linear equations. Technical Report (to appear), CERFACS, Toulouse, France, 1994.

Amestoy:1996:MPP

[AD96] Patrick R. Amestoy and Iain S. Duff. MA41: a parallel package for solving sparse unsymmetric sets of linear equations. Report, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1996. ???? pp.

Arioli:2008:UFO

[AD09] M. Arioli and I. S. Duff. Using FGMRES to obtain backward stability in mixed precision. *Electronic Transactions on Numerical Analysis (ETNA)*, 33:31–44, 2008/2009. CODEN ???? ISSN 1068-9613 (print), 1097-4067 (electronic). URL `http://etna.mcs.kent.edu/vol.33.2008-2009/pp31-44.dir/pp31-44.pdf`.

Arioli:2015:PLL

[AD15] Mario Arioli and Iain S. Duff. Preconditioning linear least-squares problems by identifying a basis matrix. *SIAM Journal on Scientific Computing*, 37(5): S544–S561, ???? 2015. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Arioli:1988:SSL

[ADD88] M. Arioli, J. W. Demmel, and I. S. Duff. Solving sparse linear systems with sparse backward error. Technical report CSS 214, Computer Science and Systems Division, AERE Harwell, Didcot, UK, 1988.

Amestoy:1989:EUP

[ADD89a] P. R. Amestoy, M. Daydé, and I. S. Duff. Efficient use of parallel matrix-matrix kernels in linear algebra on the Alliant FX/80, the CRAY-2, the ETA-10P, and the IBM 3090. In Anonymous [Ano89], pages 149–153. ISBN ???? LCCN QA76.58 .S64 1989.

Amestoy:1989:UCK

[ADD89b] P. R. Amestoy, M. Daydé, and Iain S. Duff. Use of computational kernels in the solution of full and sparse linear equations. In Cosnard et al. [CRQR89], pages 13–19. ISBN 0-444-87367-8. LCCN QA9.58; 95F.

Amestoy:1989:ULBb

[ADD89c] P. R. Amestoy, M. Daydé, and Iain S. Duff. Use of Level 3 BLAS in the solution of full and sparse linear equations. In Delhaye and Gelenbe [DG89], pages 19–31. ISBN 0-444-88043-7. LCCN QA76.5.I585; QA76.5 .I585 1989.

Amestoy:1989:ULBa

[ADD89d] P. R. Amestoy, M. J. Daydé, and I. S. Duff. Use of Level

3 BLAS kernels in the solution of full and sparse linear equations. Technical report TR 89/9, CERFACS, Toulouse, France, March 1989. ???? pp.

Arioli:1989:SSL

[ADD89e] Mario Arioli, James W. Demmel, and Iain S. Duff. Solving sparse linear systems with sparse backward error. *SIAM Journal on Matrix Analysis and Applications*, 10(2):165–190, 1989. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

Arioli:1989:ASA

[ADd89f] Mario Arioli, Iain S. Duff, and Peter P. M. de Rijk. On the augmented system approach to sparse least-squares problems. *Num. Math*, 55(6):667–684, August 1989. CODEN NUMMA7. ISSN 0029-599X (print), 0945-3245 (electronic).

Amestoy:1991:DPS

[ADD91] Patrick R. Amestoy, Michel J. Daydé, and Iain S. Duff. Designing portable parallel software for linear algebra. *Theoretica Chimica Acta*, 79(3):169–174, 1991. CODEN TCHAAM. ISSN 0040-5744.

Amestoy:1992:EUP

[ADD92] P. Amestoy, M. Daydé, and I. Duff. Efficient use of parallel matrix-matrix kernels in linear algebra on the Alliant FX/80, the Cray-2, the ETA-10P, and the IBM 3090. In Perrott [Per92], pages 255–262. ISBN 0-412-39960-1. LCCN QA76.58.S63 1992.

Amestoy:1993:PSS

[ADD93] P. R. Amestoy, M. Daydé, and Iain S. Duff. Parallel solution of sparse linear systems using the multifrontal method. In *Journées du site expérimental en hyperparallèlisme, 27–28 janvier, ETCA, Paris*, pages 226–257. CREA, Paris, France, 1993.

Amestoy:1994:DNC

[ADD94a] P. R. Amestoy, M. J. Daydé, and Iain S. Duff. Développement de noyaux de calcul et portage de codes sur calculateurs parallèles: l'expérience CERFACS-ENSEEIHT. (French) [development of computational kernels and porting code to parallel computers: the CERFACS-ENSEEIHT experience]. Technical Report RT/APO/94/2, Département Informatique N7 — IRIT, Toulouse, France, 1994.

Amestoy:1994:PAS

[ADD⁺94b] Patrick R. Amestoy, Michel J. Daydé, Iain S. Duff, Jean-Yves L'Excellent, Nick Gould, and Chiara Puglisi. Parallel algorithms for structured systems of linear equations. In Ames [Ame94], pages 1058–1061. ISBN ???? LCCN ???? Three volumes: Volume 1: Applied mathematics, stochastic processes, iterative methods. Volume 2: Applications

of computing, fluid mechanics, acoustics, solid mechanics, neural networks. Volume 3: Numerical methods and analysis finite differences and elements, differential equations, intervals.

Amestoy:1995:AMD

[ADD95] Patrick R. Amestoy, Timothy A. Davis, and Iain S. Duff. An approximate minimum degree ordering algorithm. Report TR/PA/95/09 and TR-94-039, CERFACS, Toulouse, France, 1995. ???? pp.

Amestoy:1996:AMD

[ADD96] Patrick R. Amestoy, Timothy A. Davis, and Iain S. Duff. An approximate minimum degree ordering algorithm. *SIAM Journal on Matrix Analysis and Applications*, 17(4):886–905, October 1996. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/27895.

Amestoy:1997:EPO

[ADD97] P. R. Amestoy, M. Daydé, and I. S. Duff. Evaluation de performance et optimisation de code dans le domaine du calcul numérique intensif. (French) Performance evaluation and optimization of code in numerically-intensive computing. In ????, editor, *Proceedings of ISYPAR 97*, page 6. Institut de Recherche en Informatique de Toulouse (IRIT), Tou-

louse, France, 1997. ISBN ???? LCCN ????

Amestoy:2004:AAA

[ADD04] Patrick R. Amestoy, Timothy A. Davis, and Iain S. Duff. Algorithm 837: AMD, an approximate minimum degree ordering algorithm. *Trans. on Mathematical Software*, 30(3):381–388, September 2004. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Amestoy:1992:LACb

[ADDM92a] P. R. Amestoy, M. J. Daydé, Iain S. Duff, and P. Morère. Linear algebra calculations on a virtual shared memory computer. Technical Report TR/PA/92/70, CERFACS, Toulouse, France, 1992. Published in [ADDM93].

Amestoy:1992:LACa

[ADDM92b] P. R. Amestoy, M. J. Daydé, Iain S. Duff, and P. Morère. Linear algebra calculations on the BBN TC200. In Bouge et al. [BCRT92], pages 319–330. CODEN LNCSD9. ISBN 3-540-55895-0 (Berlin), 0-387-55895-0 (New York). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.58 .J65 1992. Also published as CERFACS Report TR/PA/92/69.

Amestoy:1993:LAC

[ADDM93] P. R. Amestoy, M. J. Daydé, I. S. Duff, and P. Morère. Linear algebra calculations on a virtual shared memory computer.

International Journal of High Speed Computing, 7(1):21–43, 1993. CODEN IHSCEZ. ISSN 0129-0533.

Amestoy:1995:LAC

[ADDM95] P. R. Amestoy, I. S. Duff, M. J. Daydé, and P. Morere. Linear algebra calculations on a virtual shared memory computer. *International Journal of High Speed Computing*, 7(1):21–43, ???? 1995. CODEN IHSCEZ. ISSN 0129-0533.

Arioli:1995:PBI

[ADDR95a] M. Arioli, A. Drummond, I. S. Duff, and D. Ruiz. Parallel block iterative solvers for heterogeneous computing environments. In Moonen and Catthoor [MC95], pages 97–108. ISBN 0-444-82106-6. LCCN QA76.58 .I57 1994.

Arioli:1995:PSBb

[ADDR95b] M. Arioli, A. Drummond, I. S. Duff, and D. Ruiz. A parallel scheduler for block iterative solvers in heterogeneous computing environments. In Bailey et al. [B+95], pages 460–465. ISBN 0-89871-344-7. LCCN QA76.58.S55 1995.

Arioli:1995:PSBa

[ADDR95c] Mario Arioli, A. Drummond, Iain S. Duff, and Daniel Ruiz. A parallel scheduler for block iterative solvers in heterogeneous computing environments. Report TR/PA/94/15, CERFACS, Toulouse, France, 1995. ???? pp.

Adeli:1992:SEA

[Ade92] Hojjat Adeli, editor. *Supercomputing in engineering analysis*, volume 1 of *New generation computing*. Marcel Dekker, New York, NY, USA, 1992. ISBN 0-8247-8559-2. xi + 362 pp. LCCN TA345.S87; TA345 .S87 1991; TA345 .S87 1992.

Arioli:2007:NGP

[ADGP07] M. Arioli, I. S. Duff, S. Gratton, and S. Pralet. A note on GMRES preconditioned by a perturbed LDL^T decomposition with static pivoting. *SIAM Journal on Scientific Computing*, 29(5):2024–2044, 2007. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Arioli:1990:UAC

[ADGR90] Mario Arioli, Iain S. Duff, Nicholas I. M. Gould, and John K. Reid. Use of the P^4 and P^5 algorithms for in-core factorization of sparse matrices. *SIAM Journal on Scientific and Statistical Computing*, 11(5):913–927, September 1990. CODEN SIJCD4. ISSN 0196-5204.

Amestoy:2010:ASP

[ADGS10] P. Amestoy, I. S. Duff, A. Guermouche, and Tz. Slavova. Analysis of the solution phase of a parallel multifrontal approach. *Parallel Computing*, 36(1):3–15, January 2010. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic).

Amestoy:1998:MSW

[ADL98a] P. Amestoy, I. Duff, and J.-Y. L'Excellent. Multifrontal solvers within the PARASOL environment. *Lecture Notes in Computer Science*, 1541:7–11, 1998. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic).

Amestoy:1998:MMM

[ADL98b] P. R. Amestoy, I. S. Duff, and J.-Y. L'Excellent. MUMPS: MUltifrontal Massively Parallel Solver, version 2.0. Report TR/PA/98/02, CERFACS, Toulouse, France, 1998. ???? pp.

Amestoy:1998:PFL

[ADL98c] P. R. Amestoy, I. S. Duff, and J.-Y. L'Excellent. Parallèlisation de la factorisation LU de matrices creuses non symètriques pour des architectures à mémoire distribuée. (French) [Parallelization of the LU factorization of nonsymmetric sparse matrices for distributed-memory architectures]. *Calculateurs Parallèles Réseaux et systèmes répartis*, 10 (5):509–520, ???? 1998.

Amestoy:1998:MPD

[ADL98d] Patrick R. Amestoy, Iain S. Duff, and Jean-Yves L'Excellent. Multifrontal parallel distributed symmetric and unsymmetric solvers. Report RAL-TR-1998-051, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1998. ???? pp. URL http://epubs.cclrc. ac.uk/bitstream/154/raltr-1998051.pdf.

Amestoy:2000:MPD

[ADL00] P. R. Amestoy, I. S. Duff, and J.-Y. L'Excellent. Multifrontal parallel distributed symmetric and unsymmetric solvers. *Computer Methods in Applied Mechanics and Engineering*, 184 (2–4):501–520, April 14, 2000. CODEN CMMECC. ISSN 0045-7825, 0374-2830.

Amestoy:2012:CIE

[ADL+12] Patrick R. Amestoy, Iain S. Duff, Jean-Yves L'Excellent, Yves Robert, François-Henry Rouet, and Bora Uçar. On computing inverse entries of a sparse matrix in an out-of-core environment. *SIAM Journal on Scientific Computing*, 34(4): A1975–A1999, ???? 2012. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Amestoy:1999:FAM

[ADLK99] Patrick R. Amestoy, Iain S. Duff, Jean-Yves L'Excellent, and Jacko Koster. A fully asynchronous multifrontal solver using distributed dynamic scheduling. Report RAL-TR-1999-059 and TR/PA/99/28 and RT/APO/99/02, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, 1999. ???? pp. URL http://epubs.cclrc.ac.uk/

bitstream/219/raltr-1999059.
pdf.

Amestoy:2001:MGP

[ADLK01a] P. R. Amestoy, I. S. Duff, J.-Y. L'Excellent, and J. Koster. MUMPS: a general purpose distributed memory sparse solver. In Sørevik et al. [SMMG01], pages 122–131. CODEN LNCSD9. ISBN 3-540-41729-X (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.58 .P353 2000. URL http:// link.springer-ny.com/link/ service/series/0558/bibs/ 1947/19470121.htm; http: //link.springer-ny.com/link/ service/series/0558/papers/ 1947/19470121.pdf.

Amestoy:2001:FAM

[ADLK01b] Patrick R. Amestoy, Iain S. Duff, Jean-Yves L'Excellent, and Jacko Koster. A fully asynchronous multifrontal solver using distributed dynamic scheduling. *SIAM Journal on Matrix Analysis and Applications*, 23(1):15–41 (electronic), January 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/35819.

Amestoy:2000:ATC

[ADLL00] P. R. Amestoy, I. S. Duff, J.-Y. L'Excellent, and X. Li. Analysis, tuning and comparison of two general sparse solvers for distributed memory com-

puters. Report LBNL-45992 and TR/PA/00/72, NERSC, Lawrence Berkeley National Laboratory and CERFACS, Berkeley, CA, USA and Toulouse, France, ???? 2000. ???? pp.

Amestoy:2001:CST

[ADLL01a] P. R. Amestoy, I. S. Duff, J-Y L'Excellent, and X. Li. A comparative study of two approaches for the solution of large sparse equations on distributed memory architectures. Report, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2001. ???? pp.

Amestoy:2001:PTTb

[ADLL01b] P. R. Amestoy, I. S. Duff, J.-Y. L'Excellent, and X. Li. Performance and tuning of two distributed memory sparse solvers. In Anonymous [Ano01], page ?? ISBN 0-89871-492-3. LCCN QA76.58. 1 CD-ROM.

Amestoy:2001:ACTa

[ADLL01c] Patrick R. Amestoy, Iain S. Duff, Jean-Yves L'Excellent, and Xiaoye S. Li. Analysis and comparison of two general sparse solvers for distributed memory computers. Report RAL-TR-2001-003 and TR/PA/00/90, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, 2001. ???? pp. URL http://epubs. cclrc.ac.uk/bitstream/259/ raltr-2001003.pdf.

Amestoy:2001:ACTb

[ADLL01d] Patrick R. Amestoy, Iain S. Duff, Jean-Yves L'Excellent, and Xiaoye S. Li. Analysis and comparison of two general sparse solvers for distributed memory computers. *Trans. on Mathematical Software*, 27(4): 388–421, December 2001. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Amestoy:2001:PTTa

[ADLL01e] Patrick R. Amestoy, Iain S. Duff, Jean-Yves L'Excellent, and Xiaoye S. Li. Performance and tuning of two distributed memory sparse solvers. Report RAL-TR-2001-004 and TR/PA/00/91, Rutherford Appleton Laboratory and CER-FACS, Chilton, Oxon, England and Toulouse, France, 2001. ???? pp. URL `http://epubs. cclrc.ac.uk/bitstream/260/ raltr-2001004.pdf`.

Amestoy:2003:IIMa

[ADLL03a] Patrick R. Amestoy, Iain S. Duff, Jean-Yves L'Excellent, and Xiaoye S. Li. Impact of the implementation of MPI point-to-point communications on the performance of two general sparse solvers. Report TR/PA/03/14 and RR-4372 and LBNL-48968 and RT/APO/01/4, CERFACS, Toulouse, France, 2003. ???? pp.

Amestoy:2003:IIMb

[ADLL03b] Patrick R. Amestoy, Iain S. Duff, Jean-Yves L'Excellent, and Xiaoye S. Li. Impact of the implementation of MPI point-to-point communications on the performance of two general sparse solvers. *Parallel Computing*, 29(7):833–849, July 2003. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic).

Amestoy:1998:PIP

[ADLP98] P. R. Amestoy, I. S. Duff, J-Y L'Excellent, and P. Plecháč. PARASOL — an integrated programming environment for parallel sparse matrix solvers. Report RAL-TR-1998-039, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1998. ???? pp. URL `http://epubs. cclrc.ac.uk/bitstream/146/ raltr-1998039.pdf`.

Amestoy:1999:PIP

[ADLP99] P. R. Amestoy, I. S. Duff, J.-Y. L'Excellent, and P. Plecháč. PARASOL. An integrated programming environment for parallel sparse matrix solvers. In Allan et al. [AGS⁺99], pages 79–90. ISBN 0-306-46034-3. LCCN QA76.88 .H49 1999. Proceedings of the High-Performance Computing Initiative (HPCI) Conference, held January 12–14, 1998, in Manchester, England.

Amestoy:2015:PCE

[ADLR15] Patrick R. Amestoy, Iain S. Duff, Jean-Yves L'Excellent, and François-Henry Rouet. Parallel computation of entries of A^{-1}. *SIAM Journal on Scientific Computing*, 37(2):C268–C284, ???? 2015. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Arioli:1990:BPM

[ADNR90a] Mario Arioli, Iain Duff, J. Noailles, and Daniel Ruiz. A block projection method for sparse matrices. Report RAL-90-093 and TR-PA-90-31, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, 1990. ???? pp.

Arioli:1990:BCB

[ADNR90b] Mario Arioli, Iain S. Duff, Joseph Noailles, and Daniel Ruiz. Block Cimmino and Block SSOR algorithms for solving linear systems in a parallel environment. In Laforenza and Perego [LP90], pages 47–54. ISBN 88-204-6322-9. LCCN QA76.88 .S88 1990. L70000.

Arioli:1990:BIM

[ADNR90c] Mario Arioli, Iain S. Duff, Joseph Noailles, and Daniel Ruiz. A block iterative method for general sparse equations. In Evans et al. [EJP90], pages 187–193. ISBN 0-444-88386-X. LCCN QA76.5 .P31475 1990.

Arioli:1992:BPM

[ADNR92] Mario Arioli, Iain Duff, Joseph Noailles, and Daniel Ruiz. A block projection method for sparse matrices. *SIAM Journal on Scientific and Statistical Computing*, 13(1):47–70, January 1992. CODEN SIJCD4. ISSN 0196-5204. First Copper Mountain Conference on Iterative Methods.

Amestoy:1994:MFM

[ADP94] P. R. Amestoy, Iain S. Duff, and C. Puglisi. Multifrontal **QR** factorization in a multiprocessor environment. Tech. Rep. TR/PA/94/09, CERFACS, Toulouse, France, 1994.

Amestoy:1996:MFM

[ADP96] P. R. Amestoy, I. S. Duff, and C. Puglisi. Multifrontal QR factorization in a multiprocessor environment. *Numerical linear algebra with applications*, 3 (4):275–300, July/August 1996. CODEN NLAAEM. ISSN 1070-5325 (print), 1099-1506 (electronic). URL `http:/ /www3.interscience.wiley. com/cgi-bin/abstract?ID=15000995.`

Amestoy:2003:APSa

[ADPV03a] Patrick R. Amestoy, Iain S. Duff, Stéphane Pralet, and Christof Vömel. Adapting a parallel sparse direct solver to architectures with clusters of SMPs. Report TR/PA/03/05, CERFACS, Toulouse, France, 2003. ???? pp.

Amestoy:2003:APSb

[ADPV03b] Patrick R. Amestoy, Iain S. Duff, Stéphane Pralet, and Christof Vömel. Adapting a parallel sparse direct solver to architectures with clusters of SMPs. *Parallel Computing*, 29 (11–12):1645–1668, November/ December 2003. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic). Parallel and distributed scientific and engineering computing.

Arioli:1991:SCI

[ADR91] Mario Arioli, Iain Duff, and Daniel Ruiz. Stopping criteria for iterative solvers. Report RAL-91-057, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1991. ???? pp.

Arioli:1992:SCI

[ADR92] Mario Arioli, Iain S. Duff, and Daniel Ruiz. Stopping criteria for iterative solvers. *SIAM Journal on Matrix Analysis and Applications*, 13(1):138–144, January 1992. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

Arioli:1991:TAB

[ADRS91] M. Arioli, Iain S. Duff, D. Ruiz, and M. Sadkane. Techniques for accelerating the Block Cimmino method. Technical Report TR/PA/91/63, CERFACS, Toulouse, France, 1991.

Arioli:1992:BLT

[ADRS92a] M. Arioli, Iain S. Duff, D. Ruiz, and M. Sadkane. Block Lánczos

techniques for accelerating the Block Cimmino method. Technical Report TR/PA/92/70, CERFACS, Toulouse, France, 1992. Published in [ADRS95].

Arioli:1992:TAB

[ADRS92b] Mario Arioli, Iain S. Duff, Daniel Ruiz, and Miloud Sadkane. Techniques for accelerating the Block Cimmino method. In Dongarra et al. [DKM$^+$92], pages 98–104. ISBN 0-89871-303-X. LCCN QA76.58 .P76 1992. Also reprinted in Proceedings of One-day Workshop on Parallel Numerical Analysis, 21 June 1991. Editors D. B. Duncan, K. I. M. Mc Kinnon, and F. Plab. Report EPCC-TR92-05, Edinburgh Parallel Computing Centre, 1–7.

Arioli:1995:BLT

[ADRS95] Mario Arioli, Iain S. Duff, Daniel Ruiz, and Miloud Sadkane. Block Lánczos techniques for accelerating the Block Cimmino method. *SIAM Journal on Scientific Computing*, 16(6):1478–1511, 1995. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Amestoy:2008:PMS

[ADRU08] Patrick R. Amestoy, Iain S. Duff, Daniel Ruiz, and Bora Uçar. A parallel matrix scaling algorithm. *Lecture Notes in Computer Science*, 5336:301–313, 2008. CODEN LNCSD9. ISBN 3-540-92858-8. ISSN

0302-9743 (print), 1611-3349 (electronic).

Amestoy:2002:TSA

[ADV02] Patrick R. Amestoy, Iain S. Duff, and Christof Vömel. Task scheduling in an asynchronous distributed memory multifrontal solver. Report RAL-TR-2002-028 and TR/PA/02/105, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, 2002. ???? pp. URL http://epubs.cclrc. ac.uk/bitstream/296/raltr-2002028.pdf.

Amestoy:2004:TSA

[ADV04] Patrick R. Amestoy, Iain S. Duff, and Christof Vömel. Task scheduling in an asynchronous distributed memory multifrontal solver. *SIAM Journal on Matrix Analysis and Applications*, 26(2):544–565 (electronic), 2004. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

Amestoy:2005:TSA

[ADV05] Patrick R. Amestoy, Iain S. Duff, and Christof Vömel. Task scheduling in an asynchronous distributed memory multifrontal solver. *SIAM Journal on Matrix Analysis and Applications*, 26(2):544–565, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/41987.

Absi:1980:NME

[AG80] Élie Absi and R. Glowinski, editors. *Numerical methods for engineering: 2nd International Congress = Méthodes numériques dans les sciences de l'ingénieur: 2e Congrès international.* Dunod, Paris, France, 1980. ISBN 2-04-012165-X (vol. 1), 2-04-012194-3 (vol. 2). ???? pp. LCCN TA329 .C64 1980.

Allan:1999:HPC

[AGS⁺99] R. J. Allan, M. F. Guest, A. D. Simpson, D. S. Henty, and D. A. Nicole, editors. *High-performance computing.* Kluwer Academic Publishers, Dordrecht, The Netherlands, 1999. ISBN 0-306-46034-3. LCCN QA76.88 .H49 1999. Proceedings of the High-Performance Computing Initiative (HPCI) Conference, held January 12–14, 1998, in Manchester, England.

Ames:1994:IPI

[Ame94] W. F. Ames, editor. *IMACS '94: proceedings of the 14th IMACS World Congress on Computation and Applied Mathematics: July 11–15, 1994, Georgia Institute of Technology, Atlanta, Georgia, USA.* International Association for Mathematics and Computers in Simulation, ????, 1994. ISBN ???? LCCN ???? Three volumes: Volume 1: Applied mathematics, stochastic processes, iterative methods. Volume 2: Applications of computing, fluid

mechanics, acoustics, solid mechanics, neural networks. Volume 3: Numerical methods and analysis finite differences and elements, differential equations, intervals.

Anonymous:1989:SPC

[Ano89] Anonymous, editor. *Software for parallel computers: Exploiting parallelism through software environments, tools, algorithms and application libraries; Tutorials and Workshops. Novotel, Hammersmith, London, 13–15 June 1989*. Unicom Seminars Ltd., Uxbridge, Middlesex, UK, 1989. ISBN ???? LCCN QA76.58 .S64 1989.

Anonymous:1991:PIS

[Ano91] Anonymous, editor. *Proceedings of the International Symposium on Supercomputing: Fukuoka, Japan, November 6–8, 1991*. Kyushu University Press, Fukuoka, Japan, 1991. ISBN 4-87378-284-8. LCCN QA76.88 .I587 1991.

Anonymous:1999:PCC

[Ano99] Anonymous, editor. *Proceedings of the Computational Cattle Breeding '99 Workshop, Tuusula, Finland, March 18–20, 1999*, volume 20. International Bull Evaluation Service, Uppsala, Sweden, 1999. ISBN ???? ISSN 1011-6079. LCCN ????

Anonymous:2001:PTS

[Ano01] Anonymous, editor. *Proceedings of the Tenth SIAM Conference on Parallel Processing for Scientific Computing 2001*. SIAM, Philadelphia, PA, USA, 2001. ISBN 0-89871-492-3. LCCN QA76.58. 1 CD-ROM.

Arbenz:1998:HPA

[APSS98] Peter Arbenz, Marcin Paprzycki, Ahmed Sameh, and Vivek Sarin, editors. *High performance algorithms for structured matrix problems*, volume 2 of *Advances in the theory of computation and computational mathematics*. Nova Science, Commack, NY, USA, 1998. ISBN 1-56072-594-X. viii + 203 pp. LCCN QA267 .A345 1996; QA76.9.A43+.

Bailey:1995:PSS

[B$^+$95] David H. Bailey et al., editors. *Proceedings of the Seventh SIAM Conference on Parallel Processing for Scientific Computing (February 1995, San Francisco, CA)*. SIAM, Philadelphia, PA, USA, 1995. ISBN 0-89871-344-7. LCCN QA76.58.S55 1995.

Bell:1999:SCP

[BBC$^+$99] Kenneth L. Bell, K. A. Berrington, D. S. F. Crothers, A. Hibbert, and K. T. Taylor, editors. *Supercomputing, collision processes, and applications*, Physics of atoms and molecules. Kluwer Academic Publishers, Dordrecht, The Netherlands, 1999. ISBN 0-306-46190-0. LCCN QC794.6.C6 S86 1999. Proceedings of an International

Conference on Supercomputing, Collision Processes, and Applications held September 14–16, 1998, in Belfast, Northern Ireland, to make the occasion of the retirement of Professor Philip G. Burke, CBC, FSR.

Bai:2011:PSI

[BBD+11] Zhong-Zhi Bai, Michele Benzi, Iain S. Duff, Andreas Frommer, and Zhong-Ci Shi. Preface [Special issue: Devoted to the 2nd NASC 08 Conference in Nanjing (NSC), November 2–5, 2008]. *Linear Algebra and its Applications*, 434(11):2223–2224, June 1, 2011. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic).

Bouge:1992:PPC

[BCRT92] L. Bouge, M. Cosnard, Y. Robert, and D. Trystram, editors. *Parallel processing: CONPAR 92-VAPP V, Second Joint International Conference on Vector and Parallel Processing, Lyon, France, September 1–4, 1992: proceedings*, volume 634 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1992. CODEN LNCSD9. ISBN 3-540-55895-0 (Berlin), 0-387-55895-0 (New York). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.58 .J65 1992.

Bjorck:1980:DMS

[BD80] Å. Björck and Iain S. Duff. A direct method for the solution of sparse linear least squares problems. *Linear Algebra and its Applications*, 34:43–67, 1980. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic).

Bai:2015:PSI

[BD15] Zhong-Zhi Bai and Iain S. Duff. Preface to the special issue on "Practical methods and rigorous theories in numerical algebra and scientific computing". *Journal of Engineering Mathematics*, 93:1–2, 2015. CODEN JLEMAU. ISSN 0022-0833 (print), 1573-2703 (electronic).

Blackford:2001:USB

[BDD+01] L. S. Blackford, J. Demmel, J. Dongarra, I. Duff, S. Hammarling, G. Henry, M. Heroux, L. Kaufman, A. Lumsdaine, A. Petitet, R. Pozo, K. Remington, and R. C. Whaley. An updated set of Basic Linear Algebra Subprograms (BLAS), February 2001. Submitted to Trans. on Mathematical Software.

Blackford:2002:USB

[BDD+02] L. Susan Blackford, James Demmel, Jack Dongarra, Iain Duff, Sven Hammarling, Greg Henry, Michael Heroux, Linda Kaufman, Andrew Lumsdaine, Antoine Petitet, Roldan Pozo, Karin Remington, and R. Clint Whaley. An updated set of Basic Linear Algebra Subprograms (BLAS). *Trans. on Math-*

ematical Software, 28(2):135–151, June 2002. CODEN ACM-SCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Bouaricha:1994:ESA

[BDG94] A. Bouaricha, Iain S. Duff, and N. I. M. Gould. Experiments in solving augmented systems. Technical Report (to appear), CERFACS, Toulouse, France, 1994.

Bai:2012:IMT

[BDRS12] Zhong-Zhi Bai, Iain S. Duff, Lothar Reichel, and Zhong-Ci Shi. Innovative methods and theories in numerical algebra. *Numerical linear algebra with applications*, 19(6): 893–895, December 2012. CODEN NLAAEM. ISSN 1070-5325 (print), 1099-1506 (electronic).

Bai:1999:CIO

[BDW99] Zhong-Zhi Bai, Iain S. Duff, and Andrew J. Wathen. A class of incomplete orthogonal factorization methods I: Methods and theories. Report RAL-TR-1999-045, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1999. ???? pp.

Bai:2001:CIO

[BDW01] Zhong-Zhi Bai, Iain S. Duff, and Andrew J. Wathen. A class of incomplete orthogonal factorization methods. I. Methods and theories. *BIT Numerical Mathematics*, 41(1):53–70, 2001. CODEN BITTEL, NBITAB. ISSN

0006-3835 (print), 1572-9125 (electronic).

Bai:2009:NSI

[BDY09] Zhong-Zhi Bai, Iain S. Duff, and Jun-Feng Yin. Numerical study on incomplete orthogonal factorization preconditioners. *Journal of Computational and Applied Mathematics*, 226 (1):22–41, April 1, 2009. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic).

Carey:1989:PSM

[Car89] Graham F. Carey, editor. *Parallel supercomputing: methods, algorithms and applications*. Wiley series in parallel computing. J. Wiley and Sons, New York, NY, USA, 1989. ISBN 0-471-92436-9. x + 287 pp. LCCN M89.E02452; QA76.6.

Chaitin-Chatelin:1996:LFP

[CCF96] Françoise Chaitin-Chatelin and Valérie Frayssé. *Lectures on finite precision computations*. Software, Environments, and Tools. SIAM, Philadelphia, PA, USA, 1996. ISBN 0-89871-358-7. xvi + 235 pp. LCCN QA297.C417; QA297 .C417 1996. With a foreword by Iain S. Duff.

Chatelin:1987:SVM

[CDD87] F. Chatelin, J. Dongarra, and I. Duff. Special volume in memory of James H. Wilkinson. *Linear Algebra and its Applications*, 88/89:??, 1987. CODEN LAAPAW. ISSN 0024-

3795 (print), 1873-1856 (electronic).

Carvalho:1995:LAK

[CDG95]   L. Carvalho, I. S. Duff, and L. Giraud. Linear algebra kernels for parallel domain decomposition methods. Report TR/PA/95/26, CERFACS, Toulouse, France, 1995. ???? pp.

Carvalho:1996:LAK

[CDG96]   L. Carvalho, I. S. Duff, and L. Giraud. Linear algebra kernels for parallel domain decomposition methods. In Papadrakakis and Bugeda [PB96], pages 1–17. ISBN 84-87867-75-8. LCCN ????

Carpentieri:2000:ESP

[CDG00a]   B. Carpentieri, I. S. Duff, and L. Giraud. Experiments with sparse preconditioning of dense problems from electromagnetic applications. Report TR/PA/00/05, CERFACS, Toulouse, France, ???? 2000. ???? pp.

Carpentieri:2000:RPD

[CDG00b]   B. Carpentieri, I. S. Duff, and L. Giraud. Robust preconditioning of dense problems from electromagnetics. In Vulkov et al. [VWY01], pages 170–178. CODEN LNCSD9. ISBN 3-540-41814-8 (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA297 .N8415 2001; QA267.A1 L43 no.1988. URL `http://`

`link.springer-ny.com/link/` `service/series/0558/tocs/` `t1988.htm;` http://www.springerlink. `com/openurl.asp?genre=issue&` `issn=0302-9743&volume=1988.`

Carpentieri:2000:SSP

[CDG00c]   B. Carpentieri, I. S. Duff, and L. Giraud. Some sparse pattern selection strategies for robust Frobenius norm minimization preconditioners in electromagnetism. Report RAL-TR-2000-009, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2000. ???? pp. URL `http://epubs.cclrc.` `ac.uk/bitstream/228/raltr-` `2000009.pdf.`

Carpentieri:2000:SPS

[CDG00d]   B. Carpentieri, I. S. Duff, and L. Giraud. Sparse pattern selection strategies for robust Frobenius-norm minimization preconditioners in electromagnetism. *Numerical linear algebra with applications*, 7(7–8):667–685, 2000. CODEN NLAAEM. ISSN 1070-5325 (print), 1099-1506 (electronic). Preconditioning techniques for large sparse matrix problems in industrial applications (Minneapolis, MN, 1999).

Carpentieri:2001:RPD

[CDG01]   B. Carpentieri, I. S. Duff, and L. Giraud. Robust preconditioning of dense problems from electromagnetics. In L. Vulkov, J. Wasniewski, and P. Yalamov, editors, *Numerical Analysis and*

its Applications, volume 1988, pages 170–178. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2001. ISBN 3-540-41814-8. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN ????

Carpentieri:2002:CST

[CDG02] B. Carpentieri, I. S. Duff, and L. Giraud. A class of spectral two-level preconditioners. Report RAL-TR-2002-020, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2002. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/291/raltr-2002020.pdf`.

Carpentieri:2003:CST

[CDG03] B. Carpentieri, I. S. Duff, and L. Giraud. A class of spectral two-level preconditioners. *SIAM Journal on Scientific Computing*, 25(2):749–765 (electronic), 2003. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Carpentieri:2001:SSP

[CDGmM01] B. Carpentieri, I. S. Duff, L. Giraud, and M. Magolu monga Made. Sparse symmetric preconditioners for dense linear systems in electromagnetism. Report TR/PA/01/35, CER-FACS, Toulouse, France, 2001. ???? pp.

Carpentieri:2002:SSP

[CDGmM02] B. Carpentieri, I. S. Duff, L. Giraud, and M. Magolu

monga Made. Sparse symmetric preconditioners for dense linear systems in electromagnetism. Report RAL-TR-2002-016, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2002. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/288/raltr-2002016.pdf`.

Carpentieri:2004:SSP

[CDGmM04] B. Carpentieri, I. S. Duff, L. Giraud, and M. Magolu monga Made. Sparse symmetric preconditioners for dense linear systems in electromagnetism. *Numerical linear algebra with applications*, 11(8–9):753–771, October/November 2004. CODEN NLAAEM. ISSN 1070-5325 (print), 1099-1506 (electronic).

Carpentieri:2003:CFM

[CDGS03] B. Carpentieri, I. S. Duff, L. Giraud, and G. Sylvand. Combining fast multipole techniques and an approximate inverse preconditioner for large electromagnetism calculations. Report RAL-TR-2003-024 and TR/PA/03/77, Rutherford Appleton Laboratory and CER-FACS, Chilton, Oxon, England and Toulouse, France, ???? 2003. URL `http://epubs.cclrc.ac.uk/bitstream/316/raltr-2003024.pdf`. To appear in SIAM J. Sci. Comput.

Carpentieri:2004:EIS

[CDGS04] B. Carpentieri, I. S. Duff, L. Gi-

raud, and G. Sylvand. An embedded iterative scheme in electromagnetism. In Wyrzykowski et al. [WDPW04], pages 977–984. CODEN LNCSD9. ISBN 3-540-21946-3. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.58 .P69 2003. URL `http://link.springer-ny.com/link/service/series/0558/tocs/t3019.htm`; `http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=3019;` `http://www.springerlink.com/openurl.asp?genre=volume&id=doi:10.1007/b97218`.

Carpentieri:2005:CFM

[CDGS05] B. Carpentieri, I. S. Duff, L. Giraud, and G. Sylvand. Combining fast multipole techniques and an approximate inverse preconditioner for large electromagnetism calculations. *SIAM Journal on Scientific Computing*, 27(3):774–792, May 2005. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/60391`.

Colbrook:1997:ESI

[CDH⁺97a] A. Colbrook, I. Duff, T. Hey, K. Stüben, and C-A. Thole. EUROPORT special issue. *The International Journal of Supercomputer Applications*, 11(4): ??, ???? 1997. CODEN IJSAE9. ISSN 0890-2720.

Colbrook:1997:EES

[CDH⁺97b] Adrian Colbrook, Iain Duff, Tony Hey, Klaus Stüben, and Clemens-August Thole. Editorial: EUROPORT special issue. *The International Journal of Supercomputer Applications and High Performance Computing*, 11(4):275–276, Winter 1997. CODEN IJSCFG. ISSN 1078-3482. Reports on the EUROPORT Project to port 38 industrially relevant codes to parallel computers.

Cardenal:1996:PMS

[CDJ96a] Jesús Cardenal, Iain S. Duff, and Josè M. Jiménez. A projection method for the solution of rectangular systems. Report RAL-TR-96-013, Rutherford Appleton Laboratory, Chilton, Oxon, England, ???? 1996. ???? pp.

Cardenal:1996:SSQ

[CDJ96b] Jesús Cardenal, Iain S. Duff, and Josè M. Jiménez. Solution of sparse quasi-square rectangular systems by Gaussian elimination. Report RAL-TR-96-013 (Revised), Rutherford Appleton Laboratory, Chilton, Oxon, England, 1996. ???? pp.

Cardenal:1998:SSQ

[CDJ98] Jesús Cardenal, Iain S. Duff, and José M. Jiménez. Solution of sparse quasi-square rectangular systems by Gaussian elimination. *IMA Journal of Numerical Analysis*, 18(2):165–177, 1998. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic). URL `http://`

www3.oup.co.uk/imanum/hdb/
Volume_18/Issue_02/180165.
sgm.abs.html; http://www3.
oup.co.uk/imanum/hdb/Volume_
18/Issue_02/pdf/180165.pdf.

Cayrols:2020:PSP

[CDL20] Sébastien Cayrols, Iain S. Duff, and Florent Lopez. Parallelization of the solve phase in a task-based Cholesky solver using a sequential task flow model. *The International Journal of High Performance Computing Applications*, 34(3):340–356, May 1, 2020. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL https://journals.sagepub.com/doi/full/10.1177/1094342019888567.

Cliffe:1997:PIF

[CDS97] K. Andrew Cliffe, Iain S. Duff, and Jennifer A. Scott. Performance issues for frontal schemes on a cache based high performance computer. Report RAL-TR-97-001, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1997. ???? pp.

Cliffe:1998:PIF

[CDS98] K. A. Cliffe, I. S. Duff, and J. A. Scott. Performance issues for frontal schemes on a cache-based high-performance computer. *International Journal for Numerical Methods in Engineering*, 42(1):127–143, 1998. CODEN IJNMBH. ISSN 0029-5981 (print), 1097-0207 (electronic).

Cox:1990:RNC

[CH90] M. G. Cox and S. Hammarling, editors. *Reliable numerical computation*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1990. ISBN 0-19-853564-3. LCCN QA297 .R435 1990. US$75.00. Based on papers from a conference in honour of the late James Hardy Wilkinson (died Sunday 5th October 1986) held at National Physical Laboratory, Teddington, Middlesex, UK, 8th–10th July 1987.

Cowell:1984:SDM

[Cow84] Wayne R. Cowell, editor. *Sources and Development of Mathematical Software*. Prentice-Hall Series in Computational Mathematics, Cleve Moler, Advisor. Prentice-Hall, Englewood Cliffs, NJ 07632, USA, 1984. ISBN 0-13-823501-5. xii + 404 pp. LCCN QA76.95 .S68 1984.

CRI:1982:SEC

[CRI82] CRI, editor. *Science, Engineering and the CRAY-1, Proceedings of a Cray Research Inc. Symposium*. Cray Research, Inc., 1982.

Cosnard:1989:PDA

[CRQR89] Michel Cosnard, Y. Robert, P. Quinton, and M. Raynal, editors. *Parallel and distributed algorithms: proceedings of the International Workshop on Parallel and Distributed Algorithms, Chateau de Bonas,*

Gers, France, 3–6 October, 1988. North-Holland, Amsterdam, The Netherlands, 1989. ISBN 0-444-87367-8. xiv + 343 pp. LCCN QA9.58; 95F.

Duff:1987:PUH

[DAGR87] I. S. Duff, M. Anoli, N. I. M. Gould, and J. K. Reid. The practical use of the Hellerman–Ranck P^4 algorithm and the P^5 algorithm of Erisman et al. Report CSS213, AERE Harwell Laboratory, Chilton, Oxon, England, 1987.

Duff:2002:NA

[DBGvdV02] I. S. Duff, W. Borchers, L. Giraud, and H. A. van der Vorst. Numerical algorithms. *Lecture Notes in Computer Science*, 2400:675–676, 2002. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL http://link.springer-ny.com/link/service/series/0558/bibs/2400/24000675.htm; http://link.springer-ny.com/link/service/series/0558/papers/2400/24000675.pdf.

Dongarra:1987:PSLa

[DCDH87] Jack Dongarra, Jeremy Du Croz, Iain Duff, and Sven Hammarling. A proposal for a set of level 3 basic linear algebra subprograms. *SIGNUM Newsletter*, 22(3):2–14, July 1987. CODEN SNEWD6. ISSN 0163-5778 (print), 1558-0237 (electronic).

Dongarra:1988:SLB

[DCDH88] J. J. Dongarra, J. Du Croz, I. S. Duff, and S. Hammarling. A set of level 3 Basic Linear Algebra Subprograms. ?? ANL-MCS-TM-88, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439-4801, USA, ?? 1988.

Dongarra:1990:ASL

[DCHD90a] Jack J. Dongarra, Jeremy Du Croz, Sven Hammarling, and Iain Duff. Algorithm 679: A set of level 3 Basic Linear Algebra Subprograms: Model implementation and test programs. *Trans. on Mathematical Software*, 16(1):18–28, March 1990. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL http://www.acm.org/pubs/toc/Abstracts/0098-3500/77627.html. See also [Hig90, DH92, DDP94].

Dongarra:1990:SLB

[DCHD90b] Jack J. Dongarra, Jeremy Du Croz, Sven Hammarling, and Iain Duff. A set of level 3 Basic Linear Algebra Subprograms. *Trans. on Mathematical Software*, 16(1):1–17, March 1990. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL http://www.acm.org/pubs/toc/Abstracts/0098-3500/79170.html.

Dongarra:1986:PVC

[DD86a] J. Dongarra and I. Duff. Performance of vector computers for direct and indirect addressing in Fortran. Harwell report, AERE Harwell Laboratory, Chilton, Oxon, England, ?? 1986.

Dongarra:1986:AAC

[DD86b] Jack J. Dongarra and Iain S. Duff. Advanced architecture computers. In ????, editor, *Federal Supercomputer Programs and Policies*, pages 710–799. US Government Printing Office, Washington, DC, USA, 1986. ISBN ???? LCCN ????

Dave:1987:SMC

[DD87a] Ameet K. Dave and Iain S. Duff. Sparse matrix calculations on the CRAY-2. *Parallel Computing*, 5:55–64, 1987. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic).

Dongarra:1987:AAC

[DD87b] J. Dongarra and I. Duff. Advanced architecture computers. Technical Report ANL-MCS-TM-57 (Revision 1), Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439-4801, USA, October 1987.

Dayde:1988:ULB

[DD88] M. J. Dayde and I. S. Duff. Use of level-3 BLAS in LU factorization on the Cray-2, the ETA-10P, and the IBM 3090-200/VF. Technical Report CSS-229, Computer Science and Systems Division, Harwell Laboratory, Oxon OX11 ORA, UK, 1988.

Dayde:1989:LBL

[DD89] Michel J. Daydé and Iain S. Duff. Level 3 BLAS in LU factorization on the CRAY-2, ETA-10P, and IBM 3090-200/VF. *The International Journal of Supercomputer Applications*, 3(2):40–70, Summer 1989. CODEN IJSAE9. ISSN 0890-2720.

Dayde:1990:ULB

[DD90a] M. J. Dayde and I. S. Duff. Use of Level 3 BLAS in LU factorization in a multiprocessing environment on three vector multiprocessors: The ALLIANT FX/80, the CRAY-2, and the IBM-3090 VF. Report RAL-90-083, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1990. ???? pp.

Dayde:1990:UPL

[DD90b] Michel J. Daydé and Iain S. Duff. Use of parallel Level 3 BLAS in **LU** factorization on three vector multiprocessors, the Alliant FX/80, the CRAY-2, and the IBM 3090 VF. *ACM SIGARCH Computer Architecture News*, 18(3):82–95, 1990. CODEN CANED2. ISSN 0163-5964 (ACM), 0884-7495 (IEEE). Conference proceedings. 1990 International conference on Supercomputing, Amsterdam.

Dayde:1991:ULB

[DD91] Michel J. Daydé and Iain S. Duff. Use of Level 3 BLAS in **LU** factorization in a multitasking environment on three vector multiprocessors, the CRAY-2, the IBM 3090 VF and the Alliant FX/80. *The International Journal of Supercomputer Applications*, 5(3):92–110, 1991. CODEN IJSAE9. ISSN 0890-2720.

Davis:1992:UPM

[DD92a] Timothy A. Davis and Iain S. Duff. Unsymmetric-pattern multifrontal methods for parallel sparse **LU** factorization. Technical Report TR-91-023, Computer and Information Science Department, University of Florida, Gainesville, FL 32611, USA, 1992.

Dongarra:1992:AAC

[DD92b] Jack J. Dongarra and Iain S. Duff. Advanced architecture computers. In Adeli [Ade92], pages 19–62. ISBN 0-8247-8559-2. LCCN TA345.S87; TA345 .S87 1991; TA345 .S87 1992.

Davis:1993:UPM

[DD93] Timothy A. Davis and Iain S. Duff. An unsymmetric-pattern multifrontal method for sparse LU factorization. Report RAL-93-036, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1993. ???? pp.

Davis:1994:UPM

[DD94a] Timothy A. Davis and Iain S. Duff. An unsymmetric-pattern multifrontal method for sparse **LU** factorization. Report TR-94-038, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1994. ???? pp.

Dayde:1994:CE

[DD94b] M. J. Daydé and I. S. Duff. The CERFACS experience. In Dongarra and Wasniewski [DW94], pages 169–176. CODEN LNCSD9. ISBN 3-540-58712-8 (Berlin), 0-387-58712-8 (New York). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.58 .P35 1994. DM104.00.

Dayde:1994:PIC

[DD94c] M. J. Daydé and Iain S. Duff. Porting industrial codes and developing sparse linear solvers on parallel computers. Technical Report RAL 94-019 and C93-09-29.2, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1994.

Dongarra:1994:AAC

[DD94d] J. J. Dongarra and Iain S. Duff. Advanced architecture computers. Technical Report CS-89-90, University of Tennessee, Knoxville, TN, USA, 1994. Revision of 1987 Report AERE R12415, HMSO, London. An earlier version appeared in Federal Supercomputer Programs and Policies, US Govern-

ment Printing Office, Washington DC, 710–799.

Davis:1995:CUM

[DD95a] Timothy A. Davis and Iain S. Duff. A combined unifrontal/ multifrontal method for unsymmetric sparse matrices. Report TR-95-020, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1995. ???? pp.

Dayde:1995:PIC

[DD95b] M. J. Daydé and I. S. Duff. Porting industrial codes and developing sparse linear solvers on parallel computers. In D'Almeida et al. [DFT95], pages 295–305. CODEN COSEEO. ISSN 0956-0521 (print), 1873-6211 (electronic). Also known as VecPar'93.

Dayde:1996:BIL

[DD96a] M. Daydé and I. S. Duff. A blocked implementation of Level 3 BLAS for RISC processors. Report RAL-TR-96-014, Rutherford Appleton Laboratory, Chilton, Oxon, England, ???? 1996. ???? pp.

Dayde:1996:UCK

[DD96b] Michel J. Daydè and Iain S. Duff. Use of computational kernels in full and sparse linear solvers, efficient code design on high-performance RISC processors. Report TR-PA-96-47, CERFACS, Toulouse, France, 1996. ???? pp.

Davis:1997:CUM

[DD97a] Timothy A. Davis and Iain S. Duff. A combined unifrontal/ multifrontal method for unsymmetric sparse matrices. Report RAL-TR-97-046 and TR/PA/97/34, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, September 1997. 19 pp.

Davis:1997:UPM

[DD97b] Timothy A. Davis and Iain S. Duff. An unsymmetric-pattern multifrontal method for sparse *LU* factorization. *SIAM Journal on Matrix Analysis and Applications*, 18(1):140–158, January 1997. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/24690`.

Dayde:1997:UCK

[DD97c] M. J. Daydé and I. S. Duff. The use of computational kernels in full and sparse linear solvers, efficient code design on high-performance RISC processors. *Lecture Notes in Computer Science*, 1215:108–139, 1997. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic).

Dayde:1997:BIL

[DD97d] Michel J. Daydè and Iain S. Duff. A blocked implementation of Level 3 BLAS for RISC processors (revised version). Report RT/APO/97/2,

Rutherford Appleton Laboratory, Chilton, Oxon, England, 1997. ???? pp.

Davis:1999:CUM

[DD99a] Timothy A. Davis and Iain S. Duff. A combined unifrontal/multifrontal method for unsymmetric sparse matrices. *Trans. on Mathematical Software*, 25(1):1–20, March 1999. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL `http://www.acm.org:80/pubs/citations/journals/toms/1999-25-1/p1-davis/`.

Dayde:1999:RBB

[DD99b] Michel J. Daydé and Iain S. Duff. The RISC BLAS: A blocked implementation of Level 3 BLAS for RISC processors. *Trans. on Mathematical Software*, 25(3):316–340, September 1999. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL `http://www.acm.org/pubs/articles/journals/toms/1999-25-3/p316-dayde/p316-dayde.pdf`; `http://www.acm.org/pubs/citations/journals/toms/1999-25-3/p316-dayde/`; `http://www.acm.org/pubs/citations/journals/toms/1999-25-3/p316-dayde/#abstract`; `http://www.acm.org/pubs/citations/journals/toms/1999-25-3/p316-dayde/#indterms`.

Dongarra:1989:UNL

[DDCH89] Jack Dongarra, Iain Duff, Jeremy Du Croz, and Sven Hammarling. An update notice on the level 3 BLAS. *SIGNUM Newsletter*, 24(1):9–10, January 1989. CODEN SNEWD6. ISSN 0163-5778 (print), 1558-0237 (electronic).

Dongarra:1989:PSL

[DDDH89] Jack J. Dongarra, Jeremy Du Croz, Iain S. Duff, and Sven Hammarling. A proposal for a set of Level 3 Basic Linear Algebra Subprograms. In Rodrigue [Rod89], pages 40–44. ISBN 0-89871-228-9. LCCN QA76.5 .S515 1987.

Drummond:2015:PSB

[DDG⁺15] L. A. Drummond, Iain S. Duff, Ronan Guivarch, Daniel Ruiz, and Mohamed Zenadi. Partitioning strategies for the block Cimmino algorithm. *Journal of Engineering Mathematics*, 93:21–39, 2015. CODEN JLEMAU. ISSN 0022-0833 (print), 1573-2703 (electronic).

Dongarra:1989:VPC

[DDGM89] Jack J. Dongarra, Iain S. Duff, Patrick W. Gaffney, and Sean StJ. McKee, editors. *Vector and Parallel Computing: Issues in Applied Research and Development*. Ellis Horwood Ltd., New York, NY, USA, 1989. ISBN 0-7458-0756-9 (Ellis Horwood), 0-470-21571-2 (Halsted Press). LCCN QA76.5 .V398 1989. UK£29.95.

Dayde:1992:EDV

[DDLG92] M. J. Daydé, Iain S. Duff, J. Y. L'Excellent, and L. Gi-

raud. Evaluation d'ordinateurs vectoriels et parallèles sur un jeu de programmes représentatifs des calculs intensifs à la division avions de l'Aérospatiale: bilan de l'étape de portage. (French) [Evaluation of vector and parallel computers in a programming game representative of numerically-intensive calculations in the airplane division of l'Aérospatiale: Report of the state of the port]. Technical Report PR/PA/92/10, CERFACS, Toulouse, France, 1992.

Dayde:1993:EDV

[DDLG93] M. J. Daydé, Iain S. Duff, J. Y. L'Excellent, and L. Giraud. Evaluation d'ordinateurs vectoriels et parallèles sur un jeu de programmes représentatifs des calculs intensifs à la division avions de l'Aérospatiale: Rapport final. (French) [Evaluation of vector and parallel computers in a programming game representative of numerically-intensive calculations in the airplane division of l'Aérospatiale: Final report]. Technical Report FR/PA/93/19, CERFACS, Toulouse, France, 1993.

Davis:2020:DIP

[DDN20] Timothy A. Davis, Iain S. Duff, and Stojce Nakov. Design and implementation of a parallel Markowitz threshold algorithm. *SIAM Journal on Matrix Analysis and Applications*, 41(2):573–590, ???? 2020. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

Dayde:1993:PBI

[DDP93] Michel J. Daydé, Iain S. Duff, and Antoine Petitet. A parallel block implementation of Level 3 BLAS for MIMD vector processors. Report RAL-93-037, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1993. ???? pp.

Dayde:1994:PBI

[DDP94] Michael J. Daydé, Iain S. Duff, and Antoine Petitet. A parallel block implementation of Level-3 BLAS for MIMD vector processors. *Trans. on Mathematical Software*, 20(2):178–193, June 1994. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). See [DCHD90a, Hig90, DH92].

Drummond:1993:PDI

[DDR93] L. A. Drummond, I. S. Duff, and D. Ruiz. A parallel distributed implementation of the block conjugate gradient algorithm. Report TR/PA/93/02, CERFACS, Toulouse, France, ???? 1993. ???? pp.

Drummond:1994:PDI

[DDR94] L. A. Drummond, Iain S. Duff, and D. Ruiz. A parallel distributed implementation of the block conjugate gradient algorithm. Technical Report (to appear), CERFACS, Toulouse, France, 1994.

Dongarra:2000:TMH

[DDS00] Jack Dongarra, Iain Duff, and Danny Sorensen. Tutorial M7: High-speed numerical linear algebra: Algorithms and research directions. In ACM [ACM00], pages 21–22. ISBN ???? LCCN QA76.88. URL `http://www.sc2000.org/proceedings/info/fp.pdf`.

Dongarra:1991:SLS

[DDSv91] Jack J. Dongarra, Iain S. Duff, Danny C. Sorensen, and Henk A. van der Vorst. *Solving Linear Systems on Vector and Shared Memory Computers*. SIAM, Philadelphia, PA, USA, 1991. ISBN 0-89871-270-X. x + 256 pp. LCCN QA184 .S65 1991.

Dongarra:1998:NLA

[DDSv98] Jack J. Dongarra, Iain S. Duff, Danny C. Sorensen, and Henk A. van der Vorst. *Numerical Linear Algebra for High-Performance Computers*. Software, Environments, and Tools. SIAM, Philadelphia, PA, USA, 1998. ISBN 0-89871-428-1. xviii + 342 pp. LCCN ????

Deuflhard:1987:LSS

[DE87] P. (Peter) Deuflhard and Björn Engquist, editors. *Large scale scientific computing*, volume 7 of *Progress in scientific computing*. Birkhäuser, Cambridge, MA, USA; Berlin, Germany; Basel, Switzerland, 1987. ISBN 0-8176-3355-3. LCCN Q183.9 .L37 1987. US$30.00.

Duff:1985:SRI

[DEGR85] Iain S. Duff, A. M. Erisman, C. W. Gear, and J. K. Reid. Some remarks on inverses of sparse matrices. Technical Report CSS 171, AERE Harwell Laboratory, Chilton, Oxon, England, 1985.

Duff:1988:SSG

[DEGR88] Iain S. Duff, A. M. Erisman, C. W. Gear, and J. K. Reid. Sparsity structure and Gaussian elimination. *SIGNUM Newsletter*, 23(2):2–8, April 1988. CODEN SNEWD6. ISSN 0163-5778 (print), 1558-0237 (electronic).

Duff:1976:GND

[DER76] Iain S. Duff, A. M. Erisman, and J. K. Reid. On George's nested dissection method. *SIAM Journal on Numerical Analysis*, 13 (5):686–695, October 1976. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Duff:1986:DMS

[DER86] I. S. Duff, A. M. Erisman, and J. K. Reid. *Direct Methods for Sparse Matrices*. Clarendon Press, Oxford, UK, 1986. ISBN 0-19-853408-6 (hardcover), 0-19-853421-3 (paperback). xiii + 341 pp. LCCN QA188 .D841 1986. US$37.50.

Duff:1989:DMS

[DER89] Iain S. Duff, A. M. (Albert Maurice) Erisman, and John Ker

Reid. *Direct methods for sparse matrices.* Monographs on numerical analysis. Clarendon Press, Oxford, UK, 1989. ISBN 0-19-853421-3 (paperback). xiv + 34 pp. LCCN QA188 .D84 1989.

Duff:1997:DMS

[DER97] Iain S. Duff, A. M. (Albert Maurice) Erisman, and John Ker Reid. *Direct methods for sparse matrices.* Numerical mathematics and scientific computation. Clarendon Press, Oxford, UK, 1997. ISBN 0-19-853421-3 (paperback). xiv + 314 pp. LCCN M89.E02155; QA188. Reprint of [DER89] with corrections.

Duff:2017:DMS

[DER17] I. S. Duff, A. M. Erisman, and J. K. Reid. *Direct Methods for Sparse Matrices.* Numerical Mathematics and Scientific Computation. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, second edition, 2017. ISBN 978-019-850-8-3-8-0. xx + 429 pp.

DAlmeida:1995:VPP

[DFT95] F. D. D'Almeida, F. N. Ferreira, and B. H. V. Topping, editors. *Vector and parallel processing: 1st International meeting — September 1993, Porto, Portugal,* volume 6(4) of *Computing Systems in Engineering.* Pergamon, New York, NY, USA, 1995. CODEN COSEEO. ISSN 0956-0521 (print), 1873-6211 (electronic). Also known as VecPar'93.

Duff:1986:CSI

[DG86] I. S. Duff and C. W. Gear. Computing the structural index. *SIAM Journal on Algebraic and Discrete Methods,* 7(4):594–603, 1986. CODEN SJAMDU. ISSN 0196-5212 (print), 2168-345X (electronic).

Delhaye:1989:HPC

[DG89] J.-L. (Jean-Loïc) Delhaye and E. Gelenbe, editors. *High performance computing: proceedings of the International Symposium on High Performance Computing, Montpellier, France, 22–24 March, 1989.* North-Holland, Amsterdam, The Netherlands, 1989. ISBN 0-444-88043-7. x + 457 pp. LCCN QA76.5.I585; QA76.5 .I585 1989.

Duff:1997:DML

[DGDG97a] I. S. Duff, N. I. M. Gould, C. C. Douglas, and L. Giraud. Direct methods linear algebra in optimization iterative methods — proceedings from the International Linear Algebra Year Workshops — CERFACS, Toulouse, France — September, 1995–June, 1996 — preface. *BIT Numerical Mathematics,* 37(3):R1–R2, September 1997. CODEN BITTEL, NBITAB. ISSN 0006-3835 (print), 1572-9125 (electronic). Proceedings from the International Linear Algebra Year Workshops. September 1995–June 1996.

Duff:1997:PWD

[DGDG97b] Iain Duff, Nick Gould, Craig Douglas, and Luc Giraud, editors. *Proceedings of the Workshop on Direct Methods, September 26–29, 1995; the Workshop on Linear Algebra in Optimization, April 22–25, 1996; and the Workshop on Iterative Methods, June 10–13, 1996, held in Toulouse as part of the International Linear Algebra Year (ILAY)*. BIT, Copenhagen, 1997. CODEN NBITAB. ISSN 0006-3835 (print), 1572-9125 (electronic). BIT **37** (1997), no. 3.

Duff:2012:TPN

[DGdSU12] Iain Duff, Efstratios Gallopoulos, Daniela di Serafino, and Bora Ucar. Topic 10: Parallel numerical algorithms. *Lecture Notes in Computer Science*, 7484:550, 2012. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL `http://link.springer.com/content/pdf/10.1007/978-3-642-32820-6_54`.

Duff:1989:SMT

[DGL89] Iain S. Duff, Roger G. Grimes, and John G. Lewis. Sparse matrix test problems. *Trans. on Mathematical Software*, 15(1): 1–14, March 1989. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL `http://www.acm.org/pubs/toc/Abstracts/0098-3500/62043.html`.

Duff:1992:UGH

[DGL92] Iain S. Duff, Roger G. Grimes, and John G. Lewis. Users' guide for the Harwell–Boeing Sparse Matrix Collection (Release I). Report RAL 92-086 and TR/PA/92/86, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, December 1992. 84 pp.

Duff:1997:RBS

[DGL97] Iain S. Duff, Roger G. Grimes, and John G. Lewis. The Rutherford–Boeing Sparse Matrix Collection. Report RAL-TR-97-031 and TR/PA/97/36, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, August 1997. 59 pp.

Duff:2003:USL

[DGLM03] I. S. Duff, L. Giraud, J. Langou, and E. Martin. Using spectral low rank preconditioners for large electromagnetic calculations. Report RAL-TR-2003-023, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2003. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/315/raltr-2003023.pdf`.

Duff:2005:USL

[DGLM05] I. S. Duff, L. Giraud, J. Langou, and E. Martin. Using spectral low rank preconditioners for large electromagnetic calculations. *International Journal for Numerical Methods in*

Engineering, 62(????):416–434, ???? 2005. CODEN IJNMBH. ISSN 0029-5981 (print), 1097-0207 (electronic).

Duff:1982:SMT

[DGLP82] Iain S. Duff, Roger G. Grimes, John G. Lewis, and W. G. Poole Jr. Sparse matrix test problems. *SIGNUM Newsletter*, 17(2):22, 1982. CODEN SNEWD6. ISSN 0163-5778 (print), 1558-0237 (electronic).

Duff:1987:MMP

[DGLR87] I. Duff, N. Gould, M. Lescrenier, and J. Reid. The multifrontal method in a parallel environment. Technical Report CSS-211, AERE Harwell Laboratory, Chilton, Oxon, England, 1987.

Duff:1990:MMP

[DGLR90] Iain S. Duff, Nicholas I. M. Gould, Marc Lescrenier, and John K. Reid. The multifrontal method in a parallel environment. In Cox and Hammarling [CH90], pages 93–111. ISBN 0-19-853564-3. LCCN QA297 .R435 1990. US$75.00. Based on papers from a conference in honour of the late James Hardy Wilkinson (died Sunday 5th October 1986) held at National Physical Laboratory, Teddington, Middlesex, UK, 8th–10th July 1987.

Duff:1994:ESA

[DGP94] Iain S. Duff, N. I. M. Gould, and J. Patricio. Experiments in scaling augmented systems.

Technical Report (to appear), Rutherford Appleton Laboratory, Chilton, Oxon, England, 1994.

Duff:2007:MBP

[DGPV07] I. Duff, S. Gratton, X. Pinel, and X. Vasseur. Multigrid based preconditioners for the numerical solution of two-dimensional heterogeneous problems in geophysics. *International Journal of Computer Mathematics*, 84 (8):1167–1181, 2007. CODEN IJCMAT. ISSN 0020-7160.

Duff:1990:FSS

[DGR+90] I. S. Duff, N. I. M. Gould, J. K. Reid, J. A. Scott, and K. Turner. The factorization of sparse symmetric indefinite matrices. Report RAL-90-066, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1990. ???? pp.

Duff:1991:FSS

[DGR+91] Iain S. Duff, N. I. M. Gould, J. K. Reid, J. A. Scott, and K. Turner. Factorization of sparse symmetric indefinite matrices. *IMA Journal of Numerical Analysis*, 11(2):181–204, 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:2015:ABC

[DGRZ15] Iain S. Duff, Ronan Guivarch, Daniel Ruiz, and Mohamed Zenadi. The augmented block Cimmino distributed method. *SIAM Journal*

on Scientific Computing, 37(3): A1248–A1269, ???? 2015. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Duff:1990:CSS

[DH90] Iain S. Duff and Jaap Hollenberg. Current status in scientific computing. In ????, editor, *Proceedings of SUP'EUR Fall'90 Meeting, Aachen, September 1990*, page 18. ????, ????, 1990.

Demmel:1992:SBA

[DH92] James W. Demmel and Nicholas J. Higham. Stability of block algorithms with fast level-3 BLAS. *Trans. on Mathematical Software*, 18(3):274–291, September 1992. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL `http://www.acm.org/pubs/toc/Abstracts/0098-3500/131769.html`. See [DCHD90a, Hig90, DDP94].

Duff:2018:ESC

[DHL18] Iain Duff, Jonathan Hogg, and Florent Lopez. Experiments with sparse Cholesky using a sequential task-flow implementation. *Numerical Algebra, Control and Optimization*, 8(2):237–260, 2018. ISSN 2155-3289 (print), 2155-3297 (electronic). URL `http://aimsciences.org/article/doi/10.3934/naco.2018014`.

Duff:2020:NSS

[DHL20] Iain Duff, Jonathan Hogg, and Florent Lopez. A new sparse

LDL^T solver using a posteriori threshold pivoting. *SIAM Journal on Scientific Computing*, 42 (2):C23–C42, ???? 2020. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Duff:2001:SB

[DHP01] Iain S. Duff, Michael A. Heroux, and Roldan Pozo. The Sparse BLAS. Report RAL-TR-2001-032 and TR/PA/01/24, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, 2001. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/270/raltr-2001032.pdf`.

Duff:2002:OSB

[DHP02] Iain S. Duff, Michael A. Heroux, and Roldan Pozo. An overview of the Sparse Basic Linear Algebra Subprograms: The new standard from the BLAS Technical Forum. *Trans. on Mathematical Software*, 28(2):239–267, June 2002. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:1986:EOP

[DJ86] I. Duff and L. Johnsson. The effect of orderings on the parallelization of sparse code. Technical Memorandum ????, Mathematics and Computer Science Division, Argonne National Laboratory, Argonne, IL, USA, 1986.

Duff:1989:NOC

[DJ89]   Iain S. Duff and S. L. Johnsson. Node orderings and concurrency in structurally-symmetric sparse problems. In Carey [Car89], pages 177–189. ISBN 0-471-92436-9. LCCN M89.E02452; QA76.6.

Depeyre:1992:PES

[DJKL92]   D. Depeyre, X. Joulia, B. Koehret, and J. M. Le Lann, editors. *Proceedings: European Symposium on Computer Aided Engineering (ESCAPE 2), 5–7 October, 1992, Toulouse, France*, volume 17(11–12) (supplement) of *Computers and chemical engineering*. Pergamon, New York, NY, USA, 1992. ISBN ???? ISSN 0098-1354 (print), 1873-4375 (electronic). LCCN ????

Duff:1986:TSC

[DK86]   Iain S. Duff and Chris R. Kirby. Trends in scientific computer programs following the introduction of advanced large computers. Report AERE R11948, AERE Harwell Laboratory, London, England, 1986.

Duff:1991:TJA

[DK91]   Iain S. Duff and D. K. Kahaner. Two Japanese approaches to circuit simulation. *Scientific Information Bulletin and Office of Naval Research Asian Office. NAVSO P-3580*, 16(1):21–26, 1991.

Duff:1997:DUA

[DK97a]   Iain S. Duff and Jacko Koster. The design and use of algorithms for permuting large entries to the diagonal of sparse matrices. Report RAL-TR-97-059, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1997. ???? pp.

Koster:1997:U

[DK97b]   Iain S. Duff and Jacko Koster. Untitled. Report TR/PA/97/45, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1997. ???? pp.

Duff:1999:DUA

[DK99a]   Iain S. Duff and Jacko Koster. The design and use of algorithms for permuting large entries to the diagonal of sparse matrices. *SIAM Journal on Matrix Analysis and Applications*, 20(4):889–901 (electronic), October 1999. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/31766`. Sparse and structured matrices and their applications (Coeur d'Alene, ID, 1996).

Duff:1999:APL

[DK99b]   Iain S. Duff and Jacko Koster. On algorithms for permuting large entries to the diagonal of a sparse matrix. Report RAL-TR-1999-030, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1999. ????

pp. URL `http://epubs.cclrc.ac.uk/bitstream/202/raltr-1999030.pdf`.

Duff:2001:APL

[DK01] I. S. Duff and J. Koster. On algorithms for permuting large entries to the diagonal of a sparse matrix. *SIAM Journal on Matrix Analysis and Applications*, 22(4):973–996 (electronic), 2001. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

Duff:2013:PBS

[DK13] Iain S. Duff and Kamer Kaya. Preconditioners based on strong subgraphs. *Electronic Transactions on Numerical Analysis (ETNA)*, 40:225–248, 2013. CODEN ???? ISSN 1068-9613 (print), 1097-4067 (electronic). URL `http://etna.mcs.kent.edu//vol.40.2013/pp225-248.dir/pp225-248.pdf`.

Dongarra:1992:PFS

[DKM+92] Jack Dongarra, Ken Kennedy, Paul Messina, Danny C. Sorensen, and Robert G. Voigt, editors. *Proceedings of the Fifth SIAM Conference on Parallel Processing for Scientific Computing (Houston, TX, March 25–27, 1991)*. SIAM, Philadelphia, PA, USA, 1992. ISBN 0-89871-303-X. LCCN QA76.58 .P76 1992.

Duff:2011:DIA

[DKU11] Iain S. Duff, Kamer Kaya, and Bora Uçcar. Design, implementation, and analysis of maximum transversal algorithms. *Trans. on Mathematical Software*, 38(2):13:1–13:31, December 2011. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:2018:ESCb

[DL18] Iain Duff and Florent Lopez. Experiments with sparse Cholesky using a parametrized task graph implementation. In *Parallel processing and applied mathematics. Part I*, volume 10777 of *Lecture Notes in Comput. Sci.*, pages 197–206. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018.

Duff:1987:EAP

[DLLT87] Iain S. Duff, Jacques Laminie, Alain Lichnewsky, and François Thomasset. An experiment with arithmetic precision in linear algebra computations. *International Journal for Numerical Methods in Fluids*, 7(10):1077–1092, October 1987. CODEN IJNFDW. ISSN 0271-2091 (print), 1097-0363 (electronic).

Duff:2018:SDS

[DLN18] Iain Duff, Florent Lopez, and Stojce Nakov. Sparse direct solution on parallel computers. In *Numerical analysis and optimization*, volume 235 of *Springer Proc. Math. Stat.* Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2018.

Duff:1989:EOP

[DM89] Iain S. Duff and G. A. Meurant. The effect of ordering on preconditioned conjugate gradients. *BIT*, 29(4):635–657, 1989. CODEN BITTEL, NBITAB. ISSN 0006-3835 (print), 1572-9125 (electronic).

Duff:2011:ATE

[DM11] Iain Duff and Dubravka Mijuca. On accurate and time efficient solution of primal-mixed finite element equations in multiscale solid mechanics. *International Journal for Numerical Methods in Biomedical Engineering*, 27 (1):95–112, 2011. ISSN 2040-7947.

Duff:1992:PUL

[DMR92] Iain S. Duff, Michele Marrone, and Giuseppi Radicati. A proposal for user level sparse BLAS: Sparker working note no. 1. Report RAL-92-087 and TR-PA-92-85, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, ???? 1992. ???? pp.

Duff:1995:SLB

[DMRV95] I. S. Duff, M. Marrone, G. Radicati, and C. Vittoli. A set of Level 3 Basic Linear Algebra Subprograms for sparse matrices. Report RAL-TR-95-049, Rutherford Appleton Laboratory, Chilton, Oxon, England, ???? 1995. ???? pp.

Duff:1997:LBL

[DMRV97] Iain S. Duff, Michele Marrone, Giuseppe Radicati, and Carlo Vittoli. Level 3 Basic Linear Algebra Subprograms for sparse matrices: a user level interface. *Trans. on Mathematical Software*, 23(3):379–401, September 1997. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL http://www.acm.org/pubs/citations/journals/toms/1997-23-3/p379-duff/.

Duff:19xx:SLB

[DMRVxx] Iain S. Duff, Michele Marrone, Guiseppe Radicati, and Carlo Vittoli. A set of Level 3 Basic Linear Algebra Subprograms for sparse matrices. ???? ????, Rutherford Appleton Laboratory, Chilton, Oxon, England, 19xx. To appear.

Dongarra:1990:PPS

[DMSV90] Jack Dongarra, Paul Messina, Danny C. Sorensen, and Robert G. Voigt, editors. *Parallel Processing for Scientific Computing: Proceedings of the Fourth SIAM Conference on Parallel Processing for Scientific Computing, Chicago, Illinois, December 11–13, 1989.* SIAM, Philadelphia, PA, USA, 1990. ISBN 0-89871-262-9. LCCN QA76.58.S55 1989.

Duff:1987:SSS

[DN87] Iain S. Duff and Ulrich Nowak. On sparse solvers in a stiff integrator of extrapolation type.

IMA Journal of Numerical Analysis, 7(4):391–405, 1987. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:1987:ULP

[DNR87] Iain S. Duff, Jorge Nocedal, and John K. Reid. The use of linear programming for the solution of sparse sets of nonlinear equations. *SIAM Journal on Scientific and Statistical Computing*, 8(2):99–108, March 1987. CODEN SIJCD4. ISSN 0196-5204.

Duff:1989:ECM

[DP89] Iain S. Duff and Chiara Puglisi. Efficient computation of a matrix-matrix kernel. Report CSS 238, AERE Harwell Laboratory, Chilton, Oxon, England, 1989. ???? pp.

Duff:1990:ECM

[DP90] Iain S. Duff and Chiara Puglisi. Efficient computation of a matrix-matrix kernel. In Laforenza and Perego [LP90], pages 541–547. ISBN 88-204-6322-9. LCCN QA76.88 .S88 1990. L70000.

Dongarra:1997:VPP

[DP97] J. J. Dongarra and Jose M. L. M. Palma, editors. *Vector and parallel processing—VECPAR '96: Second International Conference on Vector and Parallel Processing-Systems and Applications, Porto, Portugal, September 25–27, 1996: Selected Papers*, volume 1215 of

Lecture Notes in Computer Science. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1997. CODEN LNCSD9. ISBN 3-540-62828-2. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.58 .I552 1996. URL http:// link.springer-ny.com/link/ service/series/0558/tocs/ t1215.htm; http://www.springerlink. com/openurl.asp?genre=issue& issn=0302-9743&volume=1215.

Duff:2004:EPS

[DP04a] I. S. Duff and S. Pralet. Experiments in preprocessing and scaling symmetric problems for multifrontal solutions. Report WN/PA/04/17, CERFACS, Toulouse, France, ???? 2004. ???? pp.

Duff:2004:SSP

[DP04b] I. S. Duff and S. Pralet. Strategies for scaling and pivoting for sparse symmetric indefinite problems. Report RAL-TR-2004-020 and TR/PA/04/59, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, ???? 2004. ???? pp. URL http://epubs. cclrc.ac.uk/bitstream/473/ raltr-2004020.pdf. To appear in SIAM J. Matrix Anal. and Applics.

Duff:2005:TSS

[DP05a] I. S. Duff and S. Pralet. Towards a stable static pivoting strategy for the sequen-

tial and parallel solution of sparse symmetric indefinite systems. Report RAL-TR-2005-007 and TR/PA/05/26 and RT/TLSE/05/08, Rutherford Appleton Laboratory and CERFACS and Institut de Recherche en Informatique de Toulouse (IRIT), Chilton, Oxon, England and Toulouse, France and Toulouse, France, ???? 2005. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/723/raltr-2005007.pdf`.

Duff:2005:SSP

[DP05b] Iain S. Duff and Stéphane Pralet. Strategies for scaling and pivoting for sparse symmetric indefinite problems. *SIAM Journal on Matrix Analysis and Applications*, 27(2):313–340, April 2005. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/61043`.

Duff:2007:TSM

[DP07] Iain S. Duff and Stéphane Pralet. Towards stable mixed pivoting strategies for the sequential and parallel solution of sparse symmetric indefinite systems. *SIAM Journal on Matrix Analysis and Applications*, 29(3):1007–1024, 2007. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

Duff:1974:CSO

[DR74] Iain S. Duff and John K. Reid. A comparison of sparsity order-ings for obtaining a pivotal sequence in Gaussian elimination. *Journal of the Institute of Mathematics and its Applications*, 14 (????):281–291, 1974. CODEN JMTAA8. ISSN 0020-2932.

Duff:1975:RSM

[DR75] Iain S. Duff and John K. Reid. On the reduction of sparse matrices to condensed forms by similarity transformations. *Journal of the Institute of Mathematics and its Applications*, 15 (????):217–224, 1975. CODEN JMTAA8. ISSN 0020-2932.

Duff:1976:CSM

[DR76] Iain S. Duff and John K. Reid. A comparison of some methods for the solution of sparse overdetermined systems of linear equations. *Journal of the Institute of Mathematics and its Applications*, 17(????):267–280, 1976. CODEN JMTAA8. ISSN 0020-2932.

Duff:1978:APB

[DR78a] Iain S. Duff and J. K. Reid. Algorithm 529: Permutations to block triangular form [F1]. *Trans. on Mathematical Software*, 4(2):189–192, June 1978. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:1978:ITA

[DR78b] Iain S. Duff and J. K. Reid. An implementation of Tarjan's algorithm for the block triangularization of a matrix. *Trans. on Mathematical Software*, 4

(2):137–147, June 1978. CO-
DEN ACMSCU. ISSN 0098-
3500 (print), 1557-7295 (elec-
tronic).

Duff:1979:PEC

[DR79a] Iain S. Duff and J. K. Reid.
Performance evaluation of codes
for sparse matrix problems. In
Fosdick [Fos79], pages 121–135.
ISBN 0-444-85330-8. LCCN
QA297 .I18 1978.

Duff:1979:SDF

[DR79b] Iain S. Duff and J. K. Reid.
Some design features of a sparse
matrix code. *Trans. on Math-
ematical Software*, 5(1):18–35,
March 1979. CODEN ACM-
SCU. ISSN 0098-3500 (print),
1557-7295 (electronic).

Duff:1982:ESM

[DR82a] I. S. Duff and J. K. Reid. Expe-
rience of sparse matrix codes on
the Cray-1. *Computer Physics
Communications*, 26(3 & 4):
293–302, June 1982. CODEN
CPHCBZ. ISSN 0010-4655
(print), 1879-2944 (electronic).

Duff:1982:MSF

[DR82b] Iain S. Duff and J. K. Reid.
MA27 — A set of Fortran
subroutines for solving sparse
symmetric sets of linear equa-
tions. Technical Report AERE
R10533, AERE Harwell Labo-
ratory, London, England, 1982.
ISBN 0-7058-0985-4. 44 pp.

Duff:1983:ENW

[DR83a] I. S. Duff and J. K. Reid. Errata:
"A note on the work involved in
no-fill sparse matrix factoriza-
tion". *IMA Journal of Numer-
ical Analysis*, 3(2):253, 1983.
CODEN IJNADH. ISSN 0272-
4979 (print), 1464-3642 (elec-
tronic).

Duff:1983:MSI

[DR83b] Iain S. Duff and J. K. Reid.
The multifrontal solution of in-
definite sparse symmetric linear
systems. *Trans. on Mathemat-
ical Software*, 9:302–325, 1983.
CODEN ACMSCU. ISSN 0098-
3500 (print), 1557-7295 (elec-
tronic).

Duff:1983:NWI

[DR83c] Iain S. Duff and J. K. Reid. A
note on the work involved in
no-fill sparse matrix factoriza-
tion. *IMA Journal of Numeri-
cal Analysis*, 3:37–40, 1983. CO-
DEN IJNADH. ISSN 0272-4979
(print), 1464-3642 (electronic).

Duff:1984:MSU

[DR84] Iain S. Duff and J. K. Reid.
The multifrontal solution of un-
symmetric sets of linear equa-
tions. *SIAM Journal on Scien-
tific and Statistical Computing*,
5(3):633–641, September 1984.
CODEN SIJCD4. ISSN 0196-
5204.

Duff:1985:PIC

[DR85a] I. S. Duff and J. K. Reid. Pro-
ceedings of the 2nd International-

Conference on Vector and Parallel Processors in Computational Science, Oxford, 28–31 August 1984 — preface. *Computer Physics Communications*, 37(1–3):R11, ???? 1985. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic).

Duff:1985:VPP

[DR85b] Iain S. Duff and J. K. Reid, editors. *Vector and Parallel Processors in Computational Science II: Proceedings of the Second International Conference on Vector and Parallel Processors in Computational Science, Oxford, 28–31 August 1984*. North-Holland, Amsterdam, The Netherlands, 1985. ISBN 0-444-86974-3. LCCN TK7885.A1 I564 1984.

Duff:1993:MFC

[DR93] Iain S. Duff and J. K. Reid. MA48, a Fortran code for direct solution of sparse unsymmetric linear systems of equations. Technical Report RAL 93-072, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1993.

Duff:1994:MFC

[DR94] Iain S. Duff and J. K. Reid. MA47, a Fortran code for direct solution of sparse symmetric indefinite structured systems of linear equations. Technical Report (to appear), Rutherford Appleton Laboratory, Chilton, Oxon, England, 1994.

Duff:1995:EZD

[DR95a] Iain S. Duff and John K. Reid. Exploiting zeros on the diagonal in the direct solution of indefinite sparse symmetric linear systems. Report RAL-TR-95-040, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1995. ???? pp.

Duff:1995:MFC

[DR95b] Iain S. Duff and John K. Reid. MA47, a Fortran code for direct solution of indefinite sparse symmetric linear systems. Report RAL 95-001, Rutherford Appleton Laboratory, Chilton, Oxon, England, January 1995. 63 pp.

Duff:1996:DMC

[DR96a] I. S. Duff and J. K. Reid. The design of MA48: a code for the direct solution of sparse unsymmetric linear systems of equations. *Trans. on Mathematical Software*, 22(2):187–226, June 1996. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL http://www.acm.org/pubs/toc/Abstracts/0098-3500/229476.html.

Duff:1996:EZD

[DR96b] I. S. Duff and J. K. Reid. Exploiting zeros on the diagonal in the direct solution of indefinite sparse symmetric linear systems. *Trans. on Mathematical Software*, 22(2):227–257, June 1996. CODEN ACMSCU. ISSN 0098-3500

(print), 1557-7295 (electronic). URL http://www.acm.org/pubs/toc/Abstracts/0098-3500/229480.html.

Duff:1979:DSS

[DRMN79] Iain S. Duff, John K. Reid, Neils Munskgaard, and Hans B. Neilsen. Direct solution of sets of linear equations whose matrix is sparse, symmetric and indefinite. *Journal of the Institute of Mathematics and its Applications*, 23(????):235–250, 1979. CODEN JMTAA8. ISSN 0020-2932.

Duff:1989:UPR

[DRS89] Iain S. Duff, J. K. Reid, and J. A. Scott. The use of profile reduction algorithms with a frontal code. *International Journal for Numerical Methods in Engineering*, 28:2555–2568, 1989. CODEN IJNMBH. ISSN 0029-5981 (print), 1097-0207 (electronic).

Duff:2004:PPB

[DRV04] I. S. Duff, S. Riyavong, and M. Van Gijzen. Parallel preconditioners based on partitioning sparse matrices. Report RAL-TR-2004-040 and TR/PA/04/114, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, ???? 2004. ???? pp. URL http://epubs.cclrc.ac.uk/bitstream/605/drvRAL2004040.pdf.

Duff:1979:SMP

[DS79] Iain S. Duff and G. W. Stewart, editors. *Sparse Matrix. Proceedings 1978: Symposium held in the Hyatt Regency, Knoxville, Tennessee on November 2–3, 1978.* SIAM, Philadelphia, PA, USA, 1979. ISBN 0-89871-160-6. LCCN QA188 S9 1978. URL http://www.gbv.de/dms/hbz/toc/ht000381636.pdf.

Duff:1991:CSE

[DS91] I. S. Duff and J. A. Scott. Computing selected eigenvalues of sparse unsymmetric matrices using subspace iteration. Report RAL-91-056, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1991. ???? pp.

Duff:1992:CSE

[DS92] Iain S. Duff and Jennifer A. Scott. Computing selected eigenvalues of sparse unsymmetric matrices. In ????, editor, *ERCIM workshop on Numerical Linear Algebra, Software Quality Principles and Techniques, Theoretical and Experimental Aspects of Knowledge Representation, Pisa, Italy, May 21–22, 1992*, pages 53–59. ERCIM, ????, 1992.

Duff:1993:CSE

[DS93a] Iain S. Duff and J. A. Scott. Computing selected eigenvalues of sparse unsymmetric matrices using subspace iteration. *Trans. on Mathematical Software*, 19(2):137–159, June 1993. CODEN

ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL `http://www.acm.org/pubs/toc/Abstracts/0098-3500/152614.html`. See [DS95].

Duff:1993:MNF

[DS93b] Iain S. Duff and J. A. Scott. MA42 — A new frontal code for solving sparse unsymmetric systems. Technical Report RAL 93-064, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1993.

Duff:1994:UMFa

[DS94a] I. S. Duff and J. A. Scott. The use of multiple fronts in Gaussian elimination. Report RAL-94-040, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1994. ???? pp.

Duff:1994:UMFb

[DS94b] Iain S. Duff and Jennifer A. Scott. The use of multiple fronts in Gaussian elimination. In Lewis [Lew94], pages 567–571. ISBN 0-89871-336-6. LCCN QA184 .S58 1994.

Duff:1995:CCS

[DS95] Iain S. Duff and Jennifer A. Scott. Corrigendum: Computing selected eigenvalues of sparse unsymmetric matrices using subspace iteration. *Trans. on Mathematical Software*, 21 (4):490, December 1995. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). See [DS93a].

[DS96a]

Duff:1996:DNF

I. S. Duff and J. A. Scott. The design of a new frontal code for solving sparse, unsymmetric systems. *Trans. on Mathematical Software*, 22(1): 30–45, March 1996. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL `http://www.acm.org/pubs/toc/Abstracts/0098-3500/225550.html`.

Duff:1996:FSS

[DS96b] I. S. Duff and J. A. Scott. Frontal software for the solution of sparse linear equations. *Lecture Notes in Computer Science*, 1184:227–238, 1996. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic).

Duff:1996:CFS

[DS96c] Iain S. Duff and Jennifer A. Scott. A comparison of frontal software with other Harwell Subroutine Library sparse direct solvers. Report RAL-TR-96-102, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1996. ???? pp.

Duff:1997:CFS

[DS97a] Iain S. Duff and Jennifer A. Scott. A comparison of frontal software with other sparse direct solvers. Report RAL-TR-96-102, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1997. ???? pp.

Duff:1997:MFC

[DS97b]   Iain S. Duff and Jennifer A. Scott. MA62 — A frontal code for sparse positive-definite symmetric systems from finite-element applications. Report RAL-TR-97-012, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1997. ???? pp.

Duff:1998:CFS

[DS98]   Iain S. Duff and Jennifer A. Scott. A comparison of frontal software with other Harwell Subroutine Library sparse direct solvers. In Arbenz et al. [APSS98], pages 1–25. ISBN 1-56072-594-X. LCCN QA267 .A345 1996; QA76.9.A43+.

Duff:1999:MFC

[DS99a]   I. S. Duff and J. A. Scott. MA62 — A frontal code for sparse positive-definite symmetric systems from finite-element applications. In Papadrakakis and Topping [PT99], pages 1–25. ISBN 1-874672-05-9. LCCN TA647 .I54 1999.

Duff:1999:FCS

[DS99b]   Iain S. Duff and Jennifer A. Scott. A frontal code for the solution of sparse positive-definite symmetric systems arising from finite-element applications. *Trans. on Mathematical Software*, 25(4):404–424, 1999. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:2002:PDS

[DS02]   Iain S. Duff and Jennifer A. Scott. A parallel direct solver for large highly unsymmetric linear systems. Report RAL-TR-2002-033, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2002. ???? pp. URL http://epubs.cclrc.ac.uk/bitstream/301/raltr-2002033.pdf.

Duff:2004:SBB

[DS04a]   I. S. Duff and J. A. Scott. Stabilized bordered block diagonal forms for parallel sparse solvers. Report RAL-TR-2004-006, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2004. URL http://epubs.cclrc.ac.uk/bitstream/320/raltr-2004006.pdf.

Duff:2004:PDS

[DS04b]   Iain S. Duff and Jennifer A. Scott. A parallel direct solver for large sparse highly unsymmetric linear systems. *Trans. on Mathematical Software*, 30(2):95–117, June 2004. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:2005:CE

[DS05a]   Iain Duff and Endre Süli. Change of Editorship. *IMA Journal of Numerical Analysis*, 25(1):i, January 2005. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642

(electronic). URL `http://imanum.oupjournals.org/cgi/reprint/25/1/i`.

Duff:2005:SBB

[DS05b] Iain S. Duff and Jennifer A. Scott. Stabilized bordered block diagonal forms for parallel sparse solvers. *Parallel Computing*, 31(3–4):275–289, March/April 2005. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic).

Duff:2010:BTF

[DU10] Iain S. Duff and Bora Uçar. On the block triangular form of symmetric matrices. *SIAM Review*, 52(3):455–470, ???? 2010. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Duff:2012:CPS

[DU12] Iain Duff and Bora Uçar. Combinatorial problems in solving linear systems. In Olaf Schenk, editor, *Combinatorial scientific computing*, Chapman & Hall/CRC Comput. Sci. Ser., pages 21–68. CRC Press, 2000 N.W. Corporate Blvd., Boca Raton, FL 33431-9868, USA, 2012. ISBN 1-4398-2735-4 (print), 1-4398-2736-2 (e-book).

Duff:1972:ASS

[Duf72] Iain Spencer Duff. *Analysis of Sparse Systems*. D. Phil., Oxford University, Oxford, England, 1972. URL `https://ora.ox.ac.uk/objects/uuid:fd22f551-9f4d-4e18-bcaf-2d62b8c2703c;` ▌

`https://search.proquest.com/pqdtglobal/docview/302648215.`▌

Duff:1974:NNA

[Duf74a] I. S. Duff. On the number of nonzeros added when Gaussian elimination is performed on sparse random matrices. *Math. Comp.*, 28(125):219–230, January 1974. CODEN MCMPAF. ISSN 0025-5718 (paper), 1088-6842 (electronic).

Duff:1974:PSR

[Duf74b] Iain S. Duff. Pivot selection and row ordering in Givens reduction on sparse matrices. *Computing*, 13:239–248, 1974. CODEN CMPTA2. ISSN 0010-485X (print), 1436-5057 (electronic).

Duff:1977:MSF

[Duf77a] Iain S. Duff. MA28 — A set of Fortran subroutines for sparse unsymmetric linear equations. Technical Report AERE R8730, Her Majesty's Stationary Office, London, England, 1977.

Duff:1977:PBT

[Duf77b] Iain S. Duff. On permutations to block triangular form. *Journal of the Institute of Mathematics and its Applications*, 19: 339–342, 1977. CODEN JMTAA8. ISSN 0020-2932.

Duff:1977:SSM

[Duf77c] Iain S. Duff. A survey of sparse matrix research. *Proc IEEE*, 65:500–535, 1977. CODEN IEEPAD. ISSN 0018-9219 (print), 1558-2256 (electronic).

Duff:1979:CGM

[Duf79a]   Iain S. Duff, editor. *Conjugate gradient methods and similar techniques*, AERE R9636. Her Majesty's Stationary Office, London, England, 1979.

Duff:1979:PCC

[Duf79b]   Iain S. Duff. Practical comparisons of codes for the solution of sparse linear systems. In Duff and Stewart [DS79], pages 107–134. ISBN 0-89871-160-6. LCCN QA188 S9 1978. URL `http://www.gbv.de/dms/hbz/toc/ht000381636.pdf`.

Duff:1979:SCA

[Duf79c]   Iain S. Duff. Some current approaches to the solution of large sparse systems of linear equations. In Absi and Glowinski [AG80], pages 559–573. ISBN 2-04-012165-X (vol. 1), 2-04-012194-3 (vol. 2). LCCN TA329 .C64 1980.

Duff:1979:SNN

[Duf79d]   Iain S. Duff. Some notes on numerical library construction. Report AERE M3057, AERE Harwell Laboratory, Chilton, Oxon, England, 1979.

Duff:1980:MSF

[Duf80a]   Iain S. Duff. *MA28, a set of Fortran subroutines for sparse unsymmetric linear equations.* AERE-R 8730 Report (Atomic Energy Research Establishment (Harwell, Oxfordshire)); AERE-R 8730. Computer Science and Systems Division, AERE Harwell, Harwell, Berkshire, UK, 1980 revision edition, November 1980. ISBN 0-7058-0593-X. 104 pp. LCCN QA195 .D84x.

Duff:1980:RDS

[Duf80b]   Iain S. Duff. Recent developments in the solution of large sparse linear equations. In Glowinski and Lions [GL80], pages 407–426. ISBN 0-444-86008-8. LCCN TA345 .I57 1979.

Duff:1980:SMT

[Duf80c]   Iain S. Duff. Sparse matrix techniques. Publicación 80-03, Escuela de Computacion. Universidad Central de Venezuela, Caracas, Venezuela, 1980.

Duff:1981:MPSa

[Duf81a]   I. S. Duff. MA32 — A package for solving sparse unsymmetric systems using the frontal method. Report AERE R10079, Rutherford Appleton Laboratory, Chilton, Oxon, England, ???? 1981. ???? pp.

Duff:1981:APZ

[Duf81b]   Iain S. Duff. Algorithm 575: Permutations for a zero-free diagonal [F1]. *Trans. on Mathematical Software*, 7(3):387–390, September 1981. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:1981:DUF

[Duf81c]   Iain S. Duff. The design and use of a frontal scheme for solving

sparse unsymmetric equations. In Hennart [Hen82], pages 240–247. ISBN 0-387-11193-X (paperback). LCCN QA3 .L28 vol. 909; QA297.

Duff:1981:FMT

[Duf81d] Iain S. Duff. Full matrix techniques in sparse Gaussian elimination. In Watson [Wat82], pages 71–84. ISBN 0-387-11199-9, 3-540-11199-9. LCCN QA3 .L28 no. 912; QA1 .L471; QA297 .D915n 1981.

Duff:1981:MPSb

[Duf81e] Iain S. Duff. MA32 — A package for solving sparse unsymmetric systems using the frontal method. Technical Report AERE R11009, Her Majesty's Stationary Office, London, England, 1981.

Duff:1981:MSU

[Duf81f] Iain S. Duff. ME28 — A sparse unsymmetric linear equation solver for complex equations. *Trans. on Mathematical Software*, 7(4):505–511, December 1981. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:1981:AOM

[Duf81g] Iain S. Duff. On algorithms for obtaining a maximum transversal. *Trans. on Mathematical Software*, 7(3):315–330, September 1981. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:1981:SF

[Duf81h] Iain S. Duff. A sparse future. In *Sparse Matrices and Their Uses: Based on the Proceedings of the IMA Numerical Analysis Group Conference / Organised by the Institute of Mathematics and Its Applications and held at the University of Reading, 9th–11th July, 1980* [Duf81i], pages 1–29. ISBN 0-12-223280-1. LCCN QA188 .S63.

Duff:1981:SMT

[Duf81i] Iain S. Duff, editor. *Sparse Matrices and Their Uses: Based on the Proceedings of the IMA Numerical Analysis Group Conference / Organised by the Institute of Mathematics and Its Applications and held at the University of Reading, 9th–11th July, 1980.* Academic Press, New York, NY, USA, 1981. ISBN 0-12-223280-1. LCCN QA188 .S63.

Duff:1982:FMT

[Duf82a] Iain S. Duff. Full matrix techniques in sparse Gaussian elimination. *Lecture Notes in Mathematics*, 912:71–84, 1982. CODEN LNMAA2. ISBN 3-540-11199-9 (print), 3-540-39009-X (e-book). ISSN 0075-8434 (print), 1617-9692 (electronic). URL `http://link.springer.com/chapter/10.1007/BFb0093150/`.

Duff:1982:SSLb

[Duf82b] Iain S. Duff. The solution of sparse linear equations on

the CRAY-1. *CRAY Channels*, 4(3):4–9, 1982. CODEN CRCHE8.

Duff:1982:SSLc

[Duf82c] Iain S. Duff. The solution of sparse linear equations on the CRAY-1. In CRI [CRI82], pages 17–39.

Duff:1982:SSLa

[Duf82d] Iain S. Duff. The solution of sparse linear equations on vector computers. Symposium on Vector Processors and Scientific Computation. ???? ????, Centro Scientifico IBM Roma, Roma, Italy, 1982.

Duff:1982:SMS

[Duf82e] Iain S. Duff. Sparse matrix software for elliptic pde's. In Trottenberg and Hackbusch [TH82], pages 410–426. ISBN 3-540-11955-8 (Berlin), 0-387-11955-8 (New York). LCCN QA3 .L28 no.960; QA3 .L35; QA379 .M84 1981; QA3 .L28; QA1 .L471; QA3 .L4. URL http:// link.springer.com/chapter/ 10.1007/BFb0069936/.

Duff:1982:UPA

[Duf82f] Iain S. Duff. The use of POLISH at Harwell. Report AERE R10555, Computer Science and Systems Division, Harwell Laboratory, Chilton, Oxon, England, 1982.

Duff:1983:C

[Duf83a] I. S. Duff. Correction. *IMA Journal of Numerical Analysis,*

3(2):253, ???? 1983. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:1983:EMP

[Duf83b] Iain S. Duff. Enhancements to the MA32 package for solving sparse unsymmetric equations. Report AERE R11009, AERE Harwell Laboratory, London, England, 1983.

Duff:1983:MAS

[Duf83c] Iain S. Duff. A multifrontal approach for solving sparse linear equations. In Pereyra and Reinoza [PR83], pages 87–98. ISBN 0-387-12334-2. LCCN QA3 .L35; QA297 .N86 1982; QA3 .L28 no. 1005; QA3 .L28; QA1 .L471; QA3 .L4. URL http:// link.springer.com/chapter/ 10.1007/BFb0112526/.

Duff:1984:BRB

[Duf84a] Iain S. Duff. Book review: *Computer Solution of Large Sparse Positive Definite Systems* (Alan George and Joseph W. Liu). *SIAM Review,* 26(2):289–291, ???? 1984. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Duff:1984:CVF

[Duf84b] Iain S. Duff. Comments on the vectorization of a frontal code. In Engquist et al. [ESY84], pages 343–347. ISBN 0-444-87620-0. LCCN QA377 .I44 1983; QA377.I44.

Duff:1984:DFF

[Duf84c] Iain S. Duff. Design features of a frontal code for solving sparse unsymmetric linear systems out-of-core. *SIAM Journal on Scientific and Statistical Computing*, 5(2):270–280, June 1984. CODEN SIJCD4. ISSN 0196-5204.

Duff:1984:DMS

[Duf84d] Iain S. Duff. Direct methods for solving sparse systems of linear equations. *SIAM Journal on Scientific and Statistical Computing*, 5:605–619, 1984. CODEN SIJCD4. ISSN 0196-5204.

Duff:1984:RDS

[Duf84e] Iain S. Duff. Research directions in sparse matrix software. *MAA Stud. Math*, 24(????):83–139, 1984. CODEN MSTMBI. ISSN 0081-8208.

Duff:1984:SNS

[Duf84f] Iain S. Duff. The solution of nearly symmetric sparse linear systems. In Glowinski and Lions [GL84], pages 57–74. ISBN 0-444-87597-2. LCCN QA297 .I57 1983.

Duff:1984:SSL

[Duf84g] Iain S. Duff. The solution of sparse linear equations on the CRAY-1. In Kowalik [Kow84], pages 293–309. ISBN 0-387-12885-9. LCCN QA76.6 .N376 1984.

Duff:1984:SE

[Duf84h] Iain S. Duff. Supercomputers in Europe. *Parallel Computing*, 1(????):321–324, 1984. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic).

Duff:1984:SSM

[Duf84i] Iain S. Duff. A survey of sparse matrix software. In Cowell [Cow84], pages 165–199. ISBN 0-13-823501-5. LCCN QA76.95 .S68 1984.

Duff:1984:UAL

[Duf84j] Iain S. Duff. The use of advanced large computers in Europe. Report AERE R11432, AERE Harwell Laboratory, London, England, 1984.

Duff:1985:SCE

[Duf85a] I. S. Duff. Super-calculators in Europe. *TSI — Technique et science informatiques*, 4(5):479–480, ???? 1985. ISSN 0752-4072 (print), 2116-5920 (electronic).

Duff:1985:CSS

[Duf85b] Iain S. Duff. Comments on the solution of sparse linear equations. *Bulletin of the Brazilian Applied Mathematics Society*, 5 (3):21–37, 1985.

Duff:1985:DSA

[Duf85c] Iain S. Duff. Data structures, algorithms and software for sparse matrices. In Evans [Eva85], pages 1–29. ISBN 0-521-26272-0. LCCN QA188 .S58 1985. URL http://www.loc.gov/catdir/description/cam031/84045714.html.

Duff:1985:USE

[Duf85d]   Iain S. Duff. The use of supercomputers in Europe. *Computer Physics Communications*, 37(1–3):15–25, 1985. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic).

Duff:1986:IVP

[Duf86a]   I. Duff. The influence of vector and parallel processors on numerical analysis. Technical Report AERE-R 12329, Computer Science and Systems Division, Harwell Laboratory, Chilton, Oxon, England, 1986.

Duff:1986:UVPa

[Duf86b]   I. Duff. Use of vector and parallel computers in the solution of large sparse linear equations. Technical report ANL/MCS-TM-84, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439-4801, USA, 1986.

Duff:1986:UVPb

[Duf86c]   I. Duff. Use of vector and parallel computers in the solution of large sparse linear equations. Technical report AERE-R 12393, Computer Science and Systems Division, Harwell Laboratory, Chilton, Oxon, England, 1986.

Duff:1986:PIM

[Duf86d]   Iain S. Duff. Parallel implementation of multifrontal schemes. *Parallel Computing*, 3:193–204, 1986. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic).

Duff:1986:PSS

[Duf86e]   Iain S. Duff. The parallel solution of sparse linear equations. In Handler et al. [HHJ$^+$86], pages 18–24. CODEN LNCSD9. ISBN 0-387-16811-7 (USA). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.5 .C61941 1986.

Duff:1987:ANT

[Duf87a]   Iain S. Duff. Algorithms and numerical techniques. In Kenway and Pawley [KP87], pages 379–428. ISBN 0-905945-15-8. LCCN QC19.2 .S26 1987.

Duff:1987:IPN

[Duf87b]   Iain S. Duff. The impact of parallelism on numerical methods. In Jesshope [Jes87], pages 255–263. ISBN 0-291-39728-X. LCCN QA76.5 .M1914 1987.

Duff:1987:IVP

[Duf87c]   Iain S. Duff. The influence of vector and parallel computers in the solution of large sparse linear equations. In Iserles and Powell [IP87], pages 359–407. ISBN 0-19-853614-3. LCCN QA297.J65 1986. URL `http://www.gbv.de/dms/hbz/toc/ht002967923.pdf`; `http://zbmath.org/?q=an:0611.00024`.

Duff:1987:MSM

[Duf87d]   Iain S. Duff. Multiprocessing a sparse matrix code on the Alliant FX/8. Technical Report

CSS-210, AERE Harwell Laboratory, Chilton, Oxon, England, 1987. ???? pp. Published in [Duf89e].

Duff:1987:SE

[Duf87e] Iain S. Duff. Supercomputing in Europe — 1987. Report CSS 206, AERE Harwell Laboratory, Chilton, Oxon, England, 1987. 8 pp.

Duff:1987:UVP

[Duf87f] Iain S. Duff. The use of vector and parallel computers in the solution of large sparse linear equations. In Deuflhard and Engquist [DE87], pages 331–348. ISBN 0-8176-3355-3. LCCN Q183.9 .L37 1987. US$30.00.

Duff:1988:CSS

[Duf88a] Iain S. Duff. Comments on the solution of sparse linear equations. *NAG Newsletter: Numerical Algorithms Group Limited, Oxford*, 2(????):3–16, 1988.

Duff:1988:EHS

[Duf88b] Iain S. Duff. Experience with the Harwell Subroutine Library on the CRAY-2. In K. Winget, editor, *CRAY User Group 1988 Spring Proceedings*, pages 338–341. Cray User Group, Inc, 186 Mandela Road, Shepherdstown, WV 25443, USA, 1988. LCCN QA76.8.C7 C74a.

Duff:1988:NAG

[Duf88c] Iain S. Duff. Numerical Analysis Group. Progress Report. January 1986–December 1987. Report, AERE Harwell Laboratory, London, England, 1988.

Duff:1988:PSM

[Duf88d] Iain S. Duff. Parallelism in sparse matrices. In Paul and Almasi [PA88], pages 99–106. ISBN 0-444-70371-3. LCCN QA76.5 .I147 1986.

Duff:1988:SE

[Duf88e] Iain S. Duff. Supercomputing in Europe — 1987. In Houstis et al. [HPP88], pages 1031–1041. CODEN LNCSD9. ISBN 0-387-18991-2, 3-540-18991-2. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA267.A1 L43 no.297. The conference was organized and sponsored by the Computer Technology Institute (C.T.I.) of Greece.

Duff:1989:AS

[Duf89a] Iain S. Duff. Architectures and systems. *Computer Physics Rep*, 11(1–6):1–20, November 1989. CODEN CPHREF. ISSN 0167-7977 (print), 1878-1004 (electronic).

Duff:1989:CEC

[Duf89b] Iain S. Duff. CERFACS: a European Center for High-Performance Computation. Centers of Supercomputing. *The International Journal of Supercomputer Applications*, 3(2):6–9, 1989. CODEN IJSAE9. ISSN 0890-2720.

Duff:1989:DS

[Duf89c] Iain S. Duff. Direct solvers. *Computer Physics Rep*, 11

(1–6):21–50, 1989. CODEN CPHREF. ISSN 0167-7977 (print), 1878-1004 (electronic).

Duff:1989:FMM

[Duf89d] Iain S. Duff. Frontal and multifrontal methods. In J. C. Almond and D. M. Young, editors, *Proceedings Modern Numerical Algorithms for Supercomputers*, pages 445–487. University of Texas at Austin, Austin, TX, USA, 1989.

Duff:1989:MSM

[Duf89e] Iain S. Duff. Multiprocessing a sparse matrix code on the Alliant FX/8. *Journal of Computational and Applied Mathematics*, 27(1–2): 229–239, September 1989. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL http://www.sciencedirect.com/science/article/pii/0377042789903683.

Duff:1989:NAG

[Duf89f] Iain S. Duff. Numerical Analysis Group. Progress Report. January 1988–December 1988. Report, AERE Harwell Laboratory, London, England, 1989.

Duff:1989:PAS

[Duf89g] Iain S. Duff. Parallel algorithms for sparse matrix solution. In Evans and Sutti [ES89], pages 73–82. ISBN 0-85274-224-X. LCCN QA76.5 .I5775 1988.

Duff:1990:MSM

[Duf90a] Iain S. Duff. Multiprocessing a sparse matrix code on the Alliant FX-8. In van der Vorst and Van Dooren [vdVV90], page ?? ISBN 0-444-88621-4. LCCN QA76.5 .P31458 1990.

Duff:1990:PAR

[Duf90b] Iain S. Duff. Parallel algorithm research at CERFACS. In Supercomputing'90 [Sup90], pages 536–542. ISBN 0-8186-2056-0 (IEEE), 0-89791-412-0 (ACM). LCCN QA76.5 .S894378 1990.

Duff:1990:PCC

[Duf90c] Iain S. Duff. Parallel computation at CERFACS. In Dongarra et al. [DMSV90], pages 66–67. ISBN 0-89871-262-9. LCCN QA76.58.S55 1989.

Duff:1990:PSS

[Duf90d] Iain S. Duff. The present status of supercomputing in Europe. In Japan Atomic Energy Research Institute [Jap90], pages 257–263. LCCN TK9153 .I464 1990.

Duff:1990:SLS

[Duf90e] Iain S. Duff. The solution of large-scale least-squares problems on supercomputers. *Annals of Operations Research*, 22(1):241–252, December 1990. CODEN AOREEV. ISSN 0254-5330 (print), 1572-9338 (electronic).

Duff:1990:S

[Duf90f]   Iain S. Duff. Supercomputers — 1988. In Manley et al. [MMO90], pages 31–44. ISBN 0-7923-0807-7 (Kluwer), 3-519-02174-9 (Teubner). LCCN TA329 .E97 1988.

Duff:1991:SSL

[Duf91a]   I. S. Duff. Solution of sparse linear equations on supercomputers. In Anonymous [Ano91], pages 252–?? ISBN 4-87378-284-8. LCCN QA76.88 .I587 1991.

Duff:1991:NAG

[Duf91b]   Iain S. Duff. Numerical Analysis Group. Progress Report. January 1989–December 1990. Report RAL 91-041, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1991.

Duff:1991:PAG

[Duf91c]   Iain S. Duff. Parallel algorithms for general sparse systems. In Spedicato [Spe91], pages 277–297. ISBN 0-387-54187-X, 3-540-54187-X. LCCN QA218 N18 1990. Proceedings of the NATO Advanced Study Institute on Computer Algorithms for Solving Linear Algebraic Equations: the State of the Art, held at Il Ciocco, Barga, Italy, September 9–21, 1990.

Duff:1992:SLS

[Duf92]   Iain S. Duff. The solution of large sparse unstructured unsymmetric systems on modern computers. In Depeyre et al. [DJKL92], page 83. ISBN ???? ISSN 0098-1354 (print), 1873-4375 (electronic). LCCN ????

Duff:1993:EPD

[Duf93a]   Iain S. Duff. Exploitation of parallelism in direct and semi-direct solution of large sparse systems. In Fincham and Ford [FF93], pages 159–174. ISBN 0-19-853680-1. LCCN QA76.58 .P3755 1993.

Duff:1993:SAS

[Duf93b]   Iain S. Duff. The solution of augmented systems. Report RAL-93-084, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1993. ???? pp.

Duff:1994:NAG

[Duf94a]   Iain S. Duff. Numerical Analysis Group. Progress Report. January 1991–December 1993. Report RAL 94-062, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1994.

Duff:1994:RFM

[Duf94b]   Iain S. Duff. A review of frontal methods for solving linear system. In Lewis [Lew94], pages 135–139. ISBN 0-89871-336-6. LCCN QA184 .S58 1994.

Duff:1994:SAS

[Duf94c]   Iain S. Duff. The solution of augmented systems. In Griffiths and Watson [GW94], pages 40–55. ISBN 0-582-22568-X. ISSN 0269-3674. LCCN QA297 .D85 1993.

Duff:1994:SSE

[Duf94d] Iain S. Duff. The solution of sparse equations on high performance computers. In Natori and Nodera [NN94], pages 1–13. LCCN R.

Reid:1995:DMC

[Duf95] John K. Reid Iain S. Duff. The design of MA48, a code for the direct solution of sparse unsymmetric linear systems of equations. Report RAL-TR-95-039, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1995. ???? pp.

Duff:1996:NAG

[Duf96a] I. S. Duff. Numerical Analysis Group. Progress Report. January 1994–December 1995. Report RAL-TR-96-015, Rutherford Appleton Laboratory, Chilton, Oxon, England, ???? 1996. ???? pp.

Duff:1996:RFM

[Duf96b] Iain S. Duff. A review of frontal methods for solving linear systems. *Computer Physics Communications*, 97(1–2):45–52, ???? 1996. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic).

Duff:1996:SNL

[Duf96c] Iain S. Duff. Sparse numerical linear algebra: Direct methods and preconditioning. Report RAL 96-047, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1996. ???? pp.

Duff:1997:SNL

[Duf97] I. S. Duff. Sparse numerical linear algebra: Direct methods and preconditioning. In Duff and Watson [DW97], pages 27–62. ISBN 0-19-850014-9. LCCN QA297.S775 1997. URL `https://global.oup.com/academic/product/the-state-of-the-art-in-numerical-analysis-9780198500148`. Based on the proceedings of a conference on the state of the art in numerical analysis. Organized by the Institute of Mathematics and Its Applications and held at York University in April 1996.

Duff:1998:DM

[Duf98a] I. S. Duff. Direct methods. Report RAL-TR-1998-054 and TR/PA/98/28, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, ???? 1998. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/156/raltr-1998054.pdf`.

Duff:1998:NAG

[Duf98b] I. S. Duff. Numerical Analysis Group. Progress Report. January 1996–December 1997. Report RAL-TR-1998-028, Rutherford Appleton Laboratory, Chilton, Oxon, England, ???? 1998. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/138/raltr-1998028.pdf`.

Duff:1999:BBRb

[Duf99a]   I. S. Duff. A brief bibliography of recent research and software for the parallel solution of large sparse linear equations. In Anonymous [Ano99], pages 43–46. ISBN ???? ISSN 1011-6079. LCCN ????

Duff:1999:MM

[Duf99b]   I. S. Duff. Matrix methods. In Bell et al. [BBC$^+$99], pages 119–136. ISBN 0-306-46190-0. LCCN QC794.6.C6 S86 1999. Proceedings of an International Conference on Supercomputing, Collision Processes, and Applications held September 14–16, 1998, in Belfast, Northern Ireland, to make the occasion of the retirement of Professor Philip G. Burke, CBC, FSR.

Duff:1999:BBRa

[Duf99c]   Iain S. Duff. A brief bibliography of recent research and software for the parallel solution of large sparse linear equations. Report TR/PA/99/12, CERFACS, Toulouse, France, 1999. ???? pp.

Duff:1999:IHP

[Duf99d]   Iain S. Duff. The impact of high performance computing in the solution of linear systems: Trends and problems. Report RAL TR-1999-072 and TR/PA/99/41, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, 1999.

???? pp. URL `http://epubs. cclrc.ac.uk/bitstream/220/ raltr-1999072.pdf`.

Duff:2000:NAG

[Duf00a]   I. S. Duff. Numerical Analysis Group. Progress Report. January 1998–December 1999. Report RAL-TR-2000-001, Rutherford Appleton Laboratory, Chilton, Oxon, England, ???? 2000. ???? pp.

Duff:2000:IHP

[Duf00b]   Iain S. Duff. The impact of high-performance computing in the solution of linear systems: trends and problems. *Journal of Computational and Applied Mathematics*, 123(1–2): 515–530, November 1, 2000. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL `http://www. sciencedirect.com/science/ article/pii/S0377042700004015`. Numerical analysis 2000, Vol. III. Linear algebra.

Duff:2002:NAG

[Duf02a]   I. S. Duff. Numerical Analysis Group. Progress Report. January 2000–December 2001. Report RAL-TR-2002-010, Rutherford Appleton Laboratory, Chilton, Oxon, England, ???? 2002. ???? pp. URL `http://epubs.cclrc. ac.uk/bitstream/285/raltr-2002010.pdf`.

Duff:2002:DMS

[Duf02b] Iain S. Duff. Direct methods for the solution of large sparse systems. In ????, editor, *Proceedings of the Conference Algèbre Linéaire et Arithmétique Calcul Numérique et Parallèle, held in Rabat, Morocco, 28–31 May, 2001*, page ?? ????, ????, 2002.

Duff:2002:MNC

[Duf02c] Iain S. Duff. MA57 — a new code for the solution of sparse symmetric indefinite systems. Report RAL-TR-2002-024, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2002. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/293/raltr-2002024.pdf`.

Duff:2004:CDI

[Duf04a] I. S. Duff. Combining direct and iterative methods for the solution of large systems in different application areas. Report RAL-TR-2004-033 and TR/PA/04/128, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, ???? 2004. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/628/duRAL2004033.pdf`.

Duff:2004:NAG

[Duf04b] I. S. Duff. Numerical Analysis Group. Progress Report. January 2002–December 2003. Report RAL-TR-2004-016, Rutherford Appleton Laboratory, Chilton, Oxon, England, ???? 2004. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/630/duffRAL2004016.pdf`.

Duff:2004:MCS

[Duf04c] Iain S. Duff. MA57—a code for the solution of sparse symmetric definite and indefinite systems. *Trans. on Mathematical Software*, 30(2):118–144, June 2004. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:2007:SSS

[Duf07] Iain S. Duff. Sparse system solution and the HSL library. In *Some topics in industrial and applied mathematics*, volume 8 of *Ser. Contemp. Appl. Math. CAM*, pages 78–94. Higher Ed. Press, Beijing, China, 2007.

Duff:2009:DUS

[Duf09] Iain S. Duff. The design and use of a sparse direct solver for skew symmetric matrices. *Journal of Computational and Applied Mathematics*, 226(1): 50–54, April 1, 2009. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic).

Duff:2010:BGW

[Duf10] Iain S. Duff. Biography of G. W. Stewart. In *G. W. Stewart: selected works with commentaries*, Contemp. Mathematicians, pages 3–9. Birkhäuser, Cambridge, MA, USA; Berlin,

Germany; Basel, Switzerland, 2010.

Duff:2012:EES

[Duf12] Iain S. Duff. European Exascale Software Initiative: Numerical libraries, solvers and algorithms. *Lecture Notes in Computer Science*, 7155:295–304, 2012. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL http://link.springer.com/content/pdf/10.1007/978-3-642-29737-3_34.

Duff:1998:LLB

[DV98a] I. S. Duff and C. Vömel. Level 2 and Level 3 Basic Linear Algebra Subprograms for sparse matrices: a Fortran 95 instantiation. Report TR/PA/00/18, CERFACS, Toulouse, France, ???? 1998. ???? pp.

Duff:1998:PPP

[Dv98b] Iain S. Duff and Henk A. van der Vorst. Preconditioning and parallel preconditioning. Report RAL-TR-1998-052 and TR/PA/98/23, Rutherford Appleton Laboratory and CERFACS, Chilton, Oxon, England and Toulouse, France, ???? 1998. ???? pp. URL http://epubs.cclrc.ac.uk/bitstream/155/raltr-1998052.pdf.

Duff:1999:DTPb

[Dv99] Iain S. Duff and Henk A. van der Vorst. Developments and trends in the parallel solu-

tion of linear systems. *Parallel Computing*, 25(13–14):1931–1970, December 1999. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic). URL http://www.elsevier.nl/gej-ng/10/35/21/32/36/39/abstract.html; http://www.elsevier.nl/gej-ng/10/35/21/32/36/39/article.pdf.

Duff:2000:INE

[DV00] Iain S. Duff and Christof Vömel. Incremental norm estimation for dense and sparse matrices. Report TR/PA/00/83, CERFACS, Toulouse, France, 2000. ???? pp.

Duff:2001:ISB

[DV01a] I. S. Duff and C. Vömel. The implementation of the Sparse BLAS in Fortran 95. Report TR/PA/01/27, CERFACS, Toulouse, France, ???? 2001. ???? pp.

Duff:2001:INE

[DV01b] Iain S. Duff and Christof Vömel. Incremental norm estimation for dense and sparse matrices. Report RAL-TR-2001-005, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2001. ???? pp. URL http://epubs.cclrc.ac.uk/bitstream/261/raltr-2001005.pdf.

Duff:2002:ARM

[DV02a] Iain S. Duff and Christof Vömel. Algorithm 818: A reference

model implementation of the Sparse BLAS in Fortran 95. *Trans. on Mathematical Software*, 28(2):268–283, June 2002. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:2002:AXR

[DV02b] Iain S. Duff and Christof Vömel. Algorithm xxx: a reference model implementation of the Sparse BLAS in Fortran 95. Report RAL-TR-2002-018, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2002. ???? pp. URL http://epubs.cclrc.ac.uk/bitstream/289/raltr-2002018.pdf.

Duff:2002:INE

[DV02c] Iain S. Duff and Christof Vömel. Incremental norm estimation for dense and sparse matrices. *BIT Numerical Mathematics*, 42 (2):300–322, June 2002. CODEN BITTEL, NBITAB. ISSN 0006-3835 (print), 1572-9125 (electronic).

Duff:1999:DTPa

[DvdV99] I. S. Duff and H. A. van der Vorst. Development and trends in the parallel solution of linear systems. Report RAL-TR-1999-027, Rutherford Appleton Laboratory, Chilton, Oxon, England, 1999. ???? pp. URL http://epubs.cclrc.ac.uk/bitstream/199/raltr-1999027.pdf.

Duff:2000:ISB

[DVY00] I. S. Duff, C. Vömel, and M. Youan. Implementing the Sparse BLAS in Fortran 95. Report TR/PA/00/82, CERFACS, Toulouse, France, ???? 2000. ???? pp.

Duff:1988:RIA

[DW88] Iain S. Duff and Torbjörn Wiberg. Remarks on implementation of $O(n^{1/2}\tau)$ assignment algorithms. *Trans. on Mathematical Software*, 14(3): 267–287, September 1988. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic).

Duff:1991:MRB

[DW91] I. S. Duff and G. A. Watson. A. R. Mitchell 70th birthday issue — editorial. *IMA Journal of Numerical Analysis*, 11(4): U449, ???? 1991. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:1993:ELF

[DW⁺93] I. S. Duff, G. A. Watson, et al. Editorial: Leslie Fox, 1918–1992. *IMA Journal of Numerical Analysis*, 13(1):i–ii, 1993. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Dongarra:1994:PSC

[DW94] J. J. Dongarra and Jerzy Wasniewski, editors. *Parallel scientific computing: First International Workshop, PARA '94,*

Lyngby, Denmark, June 20–23, 1994: proceedings, volume 879 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1994. CODEN LNCSD9. ISBN 3-540-58712-8 (Berlin), 0-387-58712-8 (New York). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.58 .P35 1994. DM104.00.

Duff:1996:U

[DW96] I. S. Duff and Ga Watson. Untitled. *IMA Journal of Numerical Analysis*, 16(1):U1, ???? 1996. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).

Duff:1997:SAN

[DW97] Iain S. Duff and G. Alistair Watson, editors. *The state of the art in numerical analysis*, volume 63 of *The Institute of Mathematics and Its Applications conference series: new series*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1997. ISBN 0-19-850014-9. LCCN QA297.S775 1997. URL https://global.oup.com/academic/product/the-state-of-the-art-in-numerical-analysis-9780198500148. Based on the proceedings of a conference on the state of the art in numerical analysis. Organized by the Institute of Mathematics and Its Applications and held at York University in April 1996.

Evans:1990:PCP

[EJP90] David J. Evans, G. R. (Gerhard Robert) Joubert, and Frans J. Peters, editors. *Parallel Computing 89: Proceedings of the international conference, Leiden, 29 August–1 September 1989*, volume 2 of *Advances in parallel computing*. North-Holland, Amsterdam, The Netherlands, 1990. ISBN 0-444-88386-X. LCCN QA76.5 .P31475 1990.

Evans:1989:PCM

[ES89] David J. Evans and C. Nodari Sutti, editors. *Parallel computing: methods, algorithms, and applications: proceedings of the International Meeting on Parallel Computing, Verona, Italy, 28–30 September 1988*. Adam Hilger Ltd., Bristol, UK, 1989. ISBN 0-85274-224-X. x + 287 pp. LCCN QA76.5 .I5775 1988.

Engquist:1984:PSM

[ESY84] Björn Engquist, Tom Smedsaas, and N. N. (Nikolai Nikolaevich) Yanenko, editors. *PDE software: modules, interfaces, and systems: proceedings of the IFIP TC 2 Working Conference on PDE Software—Modules, Interfaces, and Systems, Söderköping, Sweden, 22–26 August, 1983*. North-Holland, Amsterdam, The Netherlands, 1984. ISBN 0-444-87620-0. ix + 453 pp. LCCN QA377 .I44 1983; QA377.I44.

Evans:1985:SA

[Eva85]   David J. Evans, editor. *Sparsity and its applications.* Cambridge University Press, Cambridge, UK, 1985. ISBN 0-521-26272-0. LCCN QA188 .S58 1985. URL http://www.loc.gov/catdir/description/cam031/84045714.html.

Fincham:1993:PCB

[FF93]   A. E. Fincham and Brian J. Ford, editors. *Parallel computation: based on the proceedings of a conference on parallel computation organized by the Institute of Mathematics and Its Applications and held at St. Catherine's College, Oxford, in September 1991*, volume 46 of *Conference series / The Institute of Mathematics and Its Applications.* Clarendon Press, Oxford, UK, 1993. ISBN 0-19-853680-1. LCCN QA76.58 .P3755 1993.

Fosdick:1979:PEN

[Fos79]   Lloyd Dudley Fosdick, editor. *Performance evaluation of numerical software: proceedings of the IFIP TC 2.5 Working Conference on Performance Evaluation of Numerical Software.* North-Holland, Amsterdam, The Netherlands, 1979. ISBN 0-444-85330-8. LCCN QA297 .I18 1978.

Guo:2011:SGC

[GD11]   Xue-Ping Guo and Iain S. Duff. Semilocal and global convergence of the Newton–HSS method for systems of nonlinear equations. *Numerical linear algebra with applications*, 18 (3):299–315, May 2011. CODEN NLAAEM. ISSN 1070-5325 (print), 1099-1506 (electronic).

Golub:1987:D

[GDM87]   Gene H. Golub, Iain Duff, and Cleve Moler. Dedication. *Linear Algebra and its Applications*, 88/89:1–12, 1987. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic).

Glowinski:1980:CMA

[GL80]   R. Glowinski and Jacques Louis Lions, editors. *Computing methods in applied sciences and engineering: proceedings of the fourth International Symposium on Computing Methods in Applied Sciences and Engineering, Versailles, France, December 10–14, 1979.* North-Holland, Amsterdam, The Netherlands, 1980. ISBN 0-444-86008-8. LCCN TA345 .I57 1979.

Glowinski:1984:CMA

[GL84]   R. Glowinski and J.-L. Lions, editors. *Computing Methods in Applied Sciences and Engineering, VI: Proceedings of the Sixth International Symposium on Computing Methods in Applied Sciences and Engineering, Versailles, France, December 12–16, 1983.* North-Holland, Amsterdam, The Netherlands, 1984. ISBN 0-444-87597-2. LCCN QA297 .I57 1983.

Golub:1987:JW

[GND⁺87] Gene H. Golub, Miki Neumann, James W. Demmel, Paul Saylor, James M. Boyle, Iain Duff, and Jack Dongarra. James Wilkinson (1919–1986). *Annals of the History of Computing*, 9(2): 205–210, April/June 1987. CODEN AHCOE5. ISSN 0164-1239. From the introduction: "A series of lightly edited extracts from messages that were sent over various computer networks during the period October 5, 1986–February 13, 1987".

Griffiths:1994:NAP

[GW94] D. F. (David Francis) Griffiths and G. A. (G. Alistair) Watson, editors. *Numerical analysis 1993: proceedings of the 15th Dundee Conference, June–July 1993*, volume 303 of *Pitman research notes in mathematics series*. Longman Scientific and Technical, Harlow, Essex, 1994. ISBN 0-582-22568-X. ISSN 0269-3674. LCCN QA297 .D85 1993.

Hennart:1982:NAP

[Hen82] J. P. (Jean Pierre) Hennart, editor. *Numerical analysis: proceedings of the third IIMAS workshop held at Cocoyoc, Mexico, January 1981*, volume 909 of *Lecture notes in mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1982. ISBN 0-387-11193-X (paperback). vii + 247 pp. LCCN QA3 .L28 vol. 909; QA297.

Handler:1986:CCA

[HHJ⁺86] Wolfgang Handler, D. Haupt, R. Jeltsch, W. Juling, and O. Lange, editors. *CONPAR 86: Conference on Algorithms and Hardware for Parallel Processing, Aachen, September 17–19, 1986: proceedings*, volume 237 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1986. CODEN LNCSD9. ISBN 0-387-16811-7 (USA). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.5 .C61941 1986.

Higham:1990:EFM

[Hig90] Nicholas J. Higham. Exploiting fast matrix multiplication within the level 3 BLAS. *Trans. on Mathematical Software*, 16(4):352–368, December 1990. CODEN ACMSCU. ISSN 0098-3500 (print), 1557-7295 (electronic). URL http://www.acm.org/pubs/toc/Abstracts/0098-3500/98290.html. Describes algorithms based on Strassen's method which are asymptotically faster than the standard N^3 algorithm, and in practice, faster for $N \approx 100$, and examines their numerical stability. See [DCHD90a, DH92].

Houstis:1988:SIC

[HPP88] E. N. Houstis, T. S. Papatheodorou, and C. D. Polychronopoulos, editors. *Supercomputing: 1st International*

Conference, Athens, Greece, June 8–12, 1987: proceedings, volume 297 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1988. CODEN LNCSD9. ISBN 0-387-18991-2, 3-540-18991-2. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA267.A1 L43 no.297. The conference was organized and sponsored by the Computer Technology Institute (C.T.I.) of Greece.

Iserles:1987:SAN

[IP87] A. Iserles and M. J. D. Powell, editors. *State of the Art in Numerical Analysis. Proceedings of the Joint IMA/SIAM Conference held at the University of Birmingham, 14–18 April 1986*, volume 9 of *The Institute of Mathematics and Its Applications conference series; new series*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1987. ISBN 0-19-853614-3. LCCN QA297.J65 1986. URL `http://www.gbv.de/dms/hbz/toc/ht002967923.pdf`; `http://zbmath.org/?q=an:0611.00024`.

JAERI:1990:FIC

[Jap90] Japan Atomic Energy Research Institute, editor. *The First International Conference on Supercomputing in Nuclear Applications (SNA '90), March 12–16, 1990, Mito, Japan: proceedings*. Nuclear Energy Data Cen-ter, Tokai-mura, Japan, 1990. LCCN TK9153 .I464 1990.

Jesshope:1987:MAP

[Jes87] C. R. Jesshope, editor. *Major advances in parallel processing*. The Technical Press–Unicom applied information technology series. Gower Technical Press, Brookfield, VT, USA, 1987. ISBN 0-291-39728-X. xxi + 392 pp. LCCN QA76.5 .M1914 1987.

Kowalik:1984:HSC

[Kow84] Janusz S. Kowalik, editor. *High-speed computation: Proceedings of the NATO Advanced Research Workshop on High-Speed Computation, held at Jülich, Federal Republic of Germany, June 20–22, 1983*, volume 7 of *NATO ASI series. Series F, Computer and systems sciences*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1984. ISBN 0-387-12885-9. ix + 441 pp. LCCN QA76.6 .N376 1984.

Kenway:1987:CPP

[KP87] R. D. (Richard D.) Kenway and G. S. (G. Stuart) Pawley, editors. *Computational physics: proceedings of the Thirty-second Scottish Universities' Summer School in Physics, St. Andrews, August 1987: a NATO Advanced Study Institute*, SUSSP publications. SUSSP Publications, Edinburgh, Scotland, 1987. ISBN 0-905945-15-8. LCCN QC19.2 .S26 1987.

Lewis:1994:PFS

[Lew94] John G. (John Gregg) Lewis, editor. *Proceedings of the Fifth SIAM Conference on Applied Linear Algebra*. SIAM, Philadelphia, PA, USA, 1994. ISBN 0-89871-336-6. LCCN QA184 .S58 1994.

Liu:2016:SFA

[LLH+16] Weifeng Liu, Ang Li, Jonathan Hogg, Iain S. Duff, and Brian Vinter. A synchronization-free algorithm for parallel sparse triangular solves. In *Euro-Par 2016: parallel processing*, volume 9833 of *Lecture Notes in Computer Science*, pages 617–630. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016.

Liu:2017:FSF

[LLH+17] Weifeng Liu, Ang Li, Jonathan D. Hogg, Iain S. Duff, and Brian Vinter. Fast synchronization-free algorithms for parallel sparse triangular solves with multiple right-hand sides. *Concurrency and Computation: Practice and Experience*, 29 (21):??, November 10, 2017. CODEN CCPEBO. ISSN 1532-0626 (print), 1532-0634 (electronic).

Laforenza:1990:STS

[LP90] Domenico Laforenza and Raffaele Perego, editors. *Supercomputing tools for science and engineering*, volume 53 of *Collana scientifica*. Franco Angeli, N. Milan, Italy, 1990. ISBN 88-204-6322-9. LCCN QA76.88 .S88 1990. L70000.

Moonen:1995:APV

[MC95] Marc S. Moonen and Francky Catthoor, editors. *Algorithms and parallel VLSI architectures III: proceedings of the International Workshop, Algorithms and Parallel VLSI Architectures III, Leuven, Belgium, August 29–31, 1994*, Algorithms and Parallel VLSI Architectures. Elsevier, Amsterdam, The Netherlands, 1995. ISBN 0-444-82106-6. LCCN QA76.58 .I57 1994.

Manley:1990:PTE

[MMO90] John Manley, Sean McKee, and David Owens, editors. *Proceedings of the Third European Conference on Mathematics in Industry, August 28–31, 1988, Glasgow*, volume 5 of *European Consortium for Mathematics in Industry*. Kluwer Academic Publishers and B. G. Teubner, Dordrecht, The Netherlands and Stuttgart, Germany, 1990. ISBN 0-7923-0807-7 (Kluwer), 3-519-02174-9 (Teubner). LCCN TA329 .E97 1988.

Natori:1994:MAP

[NN94] M. Natori and T. Nodera, editors. *Matrix analysis and parallel computing*. Keio University, Yokohama, Japan, 1994. LCCN R.

Paul:1988:PSC

[PA88]   George Paul and George S. Almasi, editors. *Parallel systems and computation: proceedings of the 1986 IBM Europe Institute—Seminar on Parallel Computing, Oberlech, Austria, August 11–15, 1986.* North-Holland, Amsterdam, The Netherlands, 1988. ISBN 0-444-70371-3. LCCN QA76.5 .I147 1986.

Papadrakakis:1996:ACM

[PB96]   Manolis Papadrakakis and G. Bugeda, editors. *Advanced computational methods in structural mechanics: Human Capital and Mobility Workshop on Advanced Finite Element Solution Procedures on Innovative Computer Architectures, held in Barcelona, April 6–7, 1995.* International Centre for Numerical Methods in Engineering (CIMNE), Barcelona, Spain, 1996. ISBN 84-87867-75-8. LCCN ????

Papadopoulos:2002:IOF

[PDW02]   A. T. Papadopoulos, I. S. Duff, and A. J. Wathen. Incomplete orthogonal factorization methods using Givens rotations II: implementation and results. Report RAL-TR-2002-019 and NA-02-07, Rutherford Appleton Laboratory and Oxford University Computing Services, Chilton, Oxon, England and Oxford, Oxon, UK, ???? 2002. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/290/raltr-2002019.pdf`. To appear in BIT.

Papadopoulos:2005:CIO

[PDW05]   A. T. Papadopoulos, I. S. Duff, and A. J. Wathen. A class of incomplete orthogonal factorization methods. II. Implementation and results. *BIT Numerical Mathematics*, 45(1): 159–179, 2005. CODEN BITTEL, NBITAB. ISSN 0006-3835 (print), 1572-9125 (electronic).

Perrott:1992:SPC

[Per92]   R. H. Perrott, editor. *Software for parallel computers.* Chapman and Hall, Ltd., London, UK, 1992. ISBN 0-412-39960-1. 350 pp. LCCN QA76.58.S63 1992.

Pereyra:1983:NMP

[PR83]   V. (Victor) Pereyra and A. (Alfonso) Reinoza, editors. *Numerical methods: proceedings of the international workshop held at Caracas, June 14–18, 1982*, volume 1005 of *Lecture Notes in Mathematics.* Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1983. ISBN 0-387-12334-2. LCCN QA3 .L35; QA297 .N86 1982; QA3 .L28 no. 1005; QA3 .L28; QA1 .L471; QA3 .L4.

Papadrakakis:1999:ICM

[PT99]   Manolis Papadrakakis and B. H. V. Topping, editors. *Innovative computational methods for structural mechanics.* Saxe-Coburg Publications, Edinburgh, Scotland, 1999. ISBN

1-874672-05-9. iv + 318 pp.
LCCN TA647 .I54 1999.

Rodrigue:1989:PPS

[Rod89] G. Rodrigue, editor. *Parallel processing for scientific computing.* SIAM, Philadelphia, PA, USA, 1989. ISBN 0-89871-228-9. LCCN QA76.5 .S515 1987.

Saad:2000:PTL

[SAD⁺00] Yousef Saad, Owe Axelsson, Iain Duff, Wei-Pai Tang, and Andy Wathen, editors. *Preconditioning techniques for large sparse matrix problems in industrial applications.* J. Wiley and Sons, New York, NY, USA, 2000. CODEN NLAAEM. ISSN 1070-5325 (print), 1099-1506 (electronic). Papers from the International Conference (SPARSE '99) held at the University of Minnesota, Minneapolis, MN, June 10–12, 1999, Numer. Linear Algebra Appl. **7** (2000), no. 7–8.

Scott:2004:MHS

[SD04] J. A. Scott and I. S. Duff. Multilevel hybrid spectral element ordering. Report RAL-TR-2004-018, Rutherford Appleton Laboratory, Chilton, Oxon, England, 2004. ???? pp. URL `http://epubs.cclrc.ac.uk/bitstream/603/dsRAL91056.pdf`.

Sorevik:2001:APC

[SMMG01] Tor Sørevik, Fredrik Manne, Randi Moe, and Assefaw Hadish Gebremedhin, editors. *Applied parallel computing: new paradigms for HPC in industry and academia: 5th International Workshop, PARA 2000, Bergen, Norway, June 18–20, 2000: Proceedings*, volume 1947 of *Lecture Notes in Computer Science.* Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2001. CODEN LNCSD9. ISBN 3-540-41729-X (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.58 .P353 2000. URL `http://link.springer-ny.com/link/service/series/0558/tocs/t1947.htm`; `http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=1947.`

Spedicato:1991:CAS

[Spe91] Emilio Spedicato, editor. *Computer algorithms for solving linear algebraic equations: the state of the art*, volume 77 of *NATO ASI series. Series F, Computer and systems sciences.* Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1991. ISBN 0-387-54187-X, 3-540-54187-X. LCCN QA218 N18 1990. Proceedings of the NATO Advanced Study Institute on Computer Algorithms for Solving Linear Algebraic Equations: the State of the Art, held at Il Ciocco, Barga, Italy, September 9–21, 1990.

IEEE:1990:PSN

[Sup90] *Proceedings, Supercomputing '90: November 12–16, 1990, New York Hilton at Rockefeller*

Center, New York, NY, USA. IEEE, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1990. ISBN 0-8186-2056-0 (IEEE), 0-89791-412-0 (ACM). LCCN QA76.5 .S894378 1990.

Tuminaro:2011:SSC

[TBC⁺11] Ray Tuminaro, Michele Benzi, Xiao-Chuan Cai, Iain Duff, Howard Elman, Roland Freund, Kirk Jordan, Tim Kelley, David Keyes, Misha Kilmer, Sven Leyffer, Tom Manteuffel, Steve McCormick, David Silvester, and Homer Walker. Special section: 2010 Copper Mountain Conference. *SIAM Journal on Scientific Computing*, 33(5):2685, ???? 2011. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic). URL `http://epubs. siam.org/sisc/resource/1/ sjoce3/v33/i5/p2685_s1`.

Tuminaro:2010:SIC

[TCJ⁺10] Ray Tuminaro, Xiao-Chuan Cai, Kirk Jordan, Tom Manteuffel, Homer Walker, Iain Duff, Tim Kelley, Steve Mc-Cormick, Carol Woodward, Howard Elman, David Keyes, Michael Overton, Panayot Vassilevski, Roland Freund, Misha Kilmer, David Silvester, and Irad Yavneh. Special issue: 2008 Copper Mountain Conference. *SIAM Journal on Scientific Computing*, 32(1):VII, ???? 2010. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic).

Trottenberg:1982:MMP

[TH82] U. Trottenberg and W. Hackbusch, editors. *Multigrid methods: proceedings of the conference held at Köln-Porz, November 23–27, 1981*, volume 960 of *Lecture Notes in Mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1982. ISBN 3-540-11955-8 (Berlin), 0-387-11955-8 (New York). vii + 652 pp. LCCN QA3 .L28 no.960; QA3 .L35; QA379 .M84 1981; QA3 .L28; QA1 .L471; QA3 .L4.

Trefethen:2009:DHP

[THDC09] Anne Trefethen, Nick Higham, Iain Duff, and Peter Coveney. Developing a high-performance computing/numerical analysis roadmap. *The International Journal of High Performance Computing Applications*, 23(4):423–426, November 2009. CODEN IHPCFL. ISSN 1094-3420 (print), 1741-2846 (electronic). URL `http://hpc. sagepub.com/content/23/4/ 423.full.pdf+html`.

vanderVorst:2001:TNA

[vdVBDP01] Henk A. van der Vorst, Rob Bisseling, Iain S. Duff, and Bernard J. Philippe. Topic 11 numerical algorithms. *Lecture Notes in Computer Science*, 2150:566–567, 2001. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL `http:// link.springer-ny.com/link/ service/series/0558/bibs/`

```
2150/21500566.htm;  http:
//link.springer-ny.com/link/
service/series/0558/papers/
2150/21500566.pdf.
```

vanderVorst:2001:CMC

[vdVDE⁺01] Henk van der Vorst, Iain Duff, Howard Elman, Roland Freund, Tim Kelley, Seymour Parter, et al., editors. *Copper Mountain Conference.* SIAM, Philadelphia, PA, USA, 2001. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/97414`. Papers from the 6th Conference on Iterative Methods held in Copper Mountain, CO, April 3–7, 2000, SIAM J. Sci. Comput. **23** (2001), no. 2.

vanderVorst:2002:CMC

[vdVDE⁺02] Henk van der Vorst, Iain Duff, Howard Elman, Ronal Freund, Tim Kelley, Seymour Parter, Gerhard Starke, Nick Trefethen, Panayot Vassilevski, Homer Walker, and Olof Widlund. 2000 Copper Mountain Conference. *SIAM Journal on Scientific Computing*, 23(2):vii, March 2002. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/97414`.

vanderVorst:2003:CMC

[vdVDE⁺03] Henk van der Vorst, Iain Duff, Howard Elman, Ronal Freund, Tim Kelley, Seymour

Parter, Gerhard Starke, Nick Trefethen, Panayot Vassilevski, Homer Walker, and Olof Widlund. 2002 Copper Mountain Conference. *SIAM Journal on Scientific Computing*, 25(2):vii, March 2003. CODEN SJOCE3. ISSN 1064-8275 (print), 1095-7197 (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/97415`. Held in Copper Mountain, CO, March 24–29, 2002.

vanderVorst:1990:PAN

[vdVV90] Henk A. van der Vorst and Paul Van Dooren, editors. *Parallel algorithms for numerical linear algebra*, volume 1 of *Advances in Parallel Computing*. North-Holland, Amsterdam, The Netherlands, 1990. ISBN 0-444-88621-4. x + 330 pp. LCCN QA76.5 .P31458 1990.

Vulkov:2001:NAA

[VWY01] Lubin Vulkov, Jerzy Waśniewski, and Plamen Yalamov, editors. *Numerical analysis and its applications: Second International Conference, NAA 2000, Rousse, Bulgaria, June 11–15, 2000: Revised Papers*, volume 1988 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2001. CODEN LNCSD9. ISBN 3-540-41814-8 (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA297 .N8415 2001; QA267.A1 L43 no.1988. URL `http://`

link.springer-ny.com/link/
service/series/0558/tocs/
t1988.htm; http://www.springerlink.
com/openurl.asp?genre=issue&
issn=0302-9743&volume=1988.

http://www.springerlink.
com/openurl.asp?genre=volume&
id=doi:10.1007/b97218.

Watson:1982:NAP

[Wat82] G. A. Watson, editor. *Numerical analysis: proceedings of the 9th biennial conference, held at Dundee, Scotland, June 23–26, 1981*, volume 912 of *Lecture Notes in Mathematics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1982. ISBN 0-387-11199-9, 3-540-11199-9. LCCN QA3 .L28 no. 912; QA1 .L471; QA297 .D915n 1981.

Wyrzykowski:2004:PPA

[WDPW04] Roman Wyrzykowski, Jack Dongarra, Marcin Paprzycki, and Jerzy Waśniewski, editors. *Parallel Processing and Applied Mathematics: 5th International Conference, PPAM 2003, Częstochowa, Poland, September 7–10, 2003: Revised Papers*, volume 3019 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2004. CODEN LNCSD9. ISBN 3-540-21946-3. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.58 .P69 2003. URL http://
link.springer-ny.com/link/
service/series/0558/tocs/
t3019.htm; http://www.springerlink.
com/openurl.asp?genre=issue&
issn=0302-9743&volume=3019;