A Bibliography of Publications of Stefano Foresti

Stefano Foresti
Utah Supercomputing Institute
85 SSB, University of Utah
Salt Lake City, UT 84112
USA

Tel: +1 801 581 3173
FAX: +1 801 585 5366

E-mail: stefano@osiris.usi.utah.edu (Internet)

01 March 2018
Version 1.18

Abstract

This bibliography records publications of Stefano Foresti.

Title word cross-reference

2 [SH96]. $h-p-$ [FHS94]. p [FBS89].

-D [SH96]. **-version** [FBS89].

1 [For93]. **15-17** [SIA95]. **15-19** [QPKW94].

24-28 [Wit94].

3 [SFHM90]. **3-D** [SFHM90].

89 [IBM89].

90 [IBM90]. **91** [IBM91].

Adaptive [FPSV89]. **against** [FHMS90a, FHMS91a]. **Alerts** [FAL+06]. **Analysis** [FHMS91b]. **Applications** [For93]. **April** [Wit94]. **Austin** [Wit94].

Bibliography [BF94, DBF95]. **Biotechnology** [Wit94]. **Boundary** [HSF89, HSF94].

Challenge [For93, SH96]. **Chemistry** [Cle89, Cle90, Cle91]. **Como** [QPKW94]. **Comparison** [FBS88, FHMS90a, FHMS91a]. **Computational** [Cle89, Cle90, Cle91, Wit94]. **Computations** [FHS94]. **Computing** [SIA95]. **Conditions** [HSF89, HSF94]. **Conference** [QPKW94, SIA95]. **Congress** [Wit94]. **Correlation** [FAL+06].

D [SH96, SFHM90]. **decomposition** [QPKW94]. **Differential** [FPSV89]. **Dimensional** [HFMS92a, HFMS92b]. **Direct** [FHMS90a, FHMS91a]. **Distributed** [FZ94]. **Documentation**

[IBM89, IBM90, IBM91]. **Domain** [QPKW94]. **Dongarra** [DBF95].

Eigenproblems [HFMS90]. **Elasticity** [SMF+90a, SMF+90b]. **Elastodynamic** [HFMS92a, HFMS92b]. **Element** [FHMS91b, FHMS92, For93, FHMS93, FHS94, HSF89, HFMS90, HFMS92a, HFMS92b, HSF94, SHPF89, SMF+90a, SMF+90b, SHPF90, SPJ+91]. **Element-by-Element** [FHS94]. **Elements** [FBS88, FBS89, FHS94, SFHM90]. **engineering** [QPKW94]. **Equation** [HSF89, HSF94]. **Equations** [FPSV89, HFS89a, HFS89b, SHPF89, SMF+90a, SMF+90b, SHPF90, SPJ+91]. **Estimates** [SH96]. **Evaluation** [FHMS90a, FHMS90b, FHMS91a, SFHM90].

February [SIA95]. **Finite** [FBS88, FBS89, FHMS91b, FHMS92, For93, FHMS93, FHS94, HSF89, HFMS90, HFMS92a, HFMS92b, HSF94, SHPF89, SMF+90a, SMF+90b, SHPF90, SFHM90, SPJ+91]. **First** [Wit94]. **Flow** [HSF89, HSF94, SHPF89, SHPF90, SPJ+91]. **Fluid** [SHPF89, SHPF90, SPJ+91]. **Francisco** [SIA95].

Gene [BF94]. **Generalized** [HFMS90]. **Golub** [BF94].

H [BF94]. **Health** [Wit94].

Image [SH96]. **Images** [FZ94, FZ95]. **Implementation** [FBS88, FHMS90b, For93, HSF89, HSF94]. **Incompressible** [HSF89, HFS89a, HFS89b, HSF94]. **Input** [IBM89, IBM90, IBM91]. **Input/Output** [IBM89, IBM90, IBM91]. **International** [QPKW94]. **Italy** [QPKW94]. **Iterative** [FHMS90a, FHMS90b, FHMS91a, FHMS92, FHMS93].

J [DBF95]. **Jack** [DBF95]. **June** [QPKW94].

Large [FHMS91b, For93, FHS94, HFMS90, HFMS92a, HFMS92b, SFHM90]. **Large-Scale** [FHMS91b, For93, FHS94, HFMS90, HFMS92a, HFMS92b]. **Least** [SH96].

Machine [FHMS92, FHMS93]. **Machines** [FHMS90b]. **MasPar** [For93]. **Massively** [For93, FZ94]. **Medicine** [Wit94]. **Memory** [FHMS90b, FHMS91b, FHMS92, FHMS93]. **Method** [FBS88, FBS89, FHS94, HFS89a, HFS89b]. **Methods** [FPSV89, FBS88, FHMS90a, FHMS91a, FZ94, FZ95, SHPF89, SMF+90a, SMF+90b, SHPF90, SPJ+91, QPKW94]. **Metodi** [For87]. **Minimal** [FHMS91b, HFMS90, HFMS92a, HFMS92b, SFHM90]. **Modern** [Cle89, Cle90, Cle91]. **MOTECC** [IBM89, Cle89, IBM90, Cle90, IBM91, Cle91]. **MOTECC-89** [IBM89, Cle89]. **MOTECC-90** [IBM90, Cle90]. **MOTECC-91** [IBM91, Cle91]. **MP** [For93]. **MP-1** [For93]. **Multigrid** [For87]. **Multilevel** [FBS88, FBS89, HFS89a, HFS89b].

Navier [HFS89a, HFS89b]. **Navier-Stokes** [HFS89a, HFS89b]. **Network** [FAL+06].

Operator [FHMS90a, FHMS90b, FHMS91a, FHMS92, FHMS93, SFHM90]. **other** [FBS88]. **Output** [IBM89, IBM90, IBM91].

p [FBS88, SFHM90]. **p-Version** [SFHM90, FBS88]. **Parallel** [FBS88, FHMS90b, FHMS92, For93, FHMS93, FZ94, FHS94, FZ95, SH96, SIA95]. **Parallelizzazione** [For87]. **Partial** [FPSV89]. **Poisson** [HSF89, HSF94]. **Power** [SH96]. **Preconditioned** [FHMS90a, FHMS91a]. **Pressure** [HSF89, HSF94]. **Problems**

[FHMS91b, HFMS92a, HFMS92b, SFHM90]. **Proceedings** [Wit94, SIA95]. **Processing** [SIA95]. **Public** [Wit94]. **Publications** [BF94, DBF95].

Rapid [FHMS90a, FHMS90b, FHMS91a, FHMS92, FHMS93, SFHM90]. **Reconstruction** [FZ94, FZ95]. **Reconstructions** [SH96]. **Report** [For93].

San [SIA95]. **Scale** [FHMS91b, For93, FHS94, HFMS90, HFMS92a, HFMS92b]. **science** [QPKW94]. **Scientific** [SIA95]. **Seventh** [SIA95]. **SGI** [SH96]. **Shared** [FHMS90b, FHMS92, FHMS93]. **SIAM** [SIA95]. **sixth** [QPKW94]. **Solution** [FBS88, FBS89, FHMS90a, FHMS90b, FHMS91a, HFS89a, HFS89b, HFMS90, HFMS92a, HFMS92b, SHPF89, SMF+90a, SMF+90b, SHPF90, SFHM90, SPJ+91]. **Solvers** [FHMS92, FHMS93]. **SPECT** [FZ94, FZ95, SH96]. **Spettrali** [For87]. **Squares** [SH96]. **Stokes** [HFS89a, HFS89b]. **Storage** [HFMS90, HFMS92a, HFMS92b, SFHM90]. **Structural** [FHMS91b].

Techniques [Cle89, Cle90, Cle91, FHMS90a, FHMS90b, FHMS91a]. **Texas** [Wit94]. **Their** [SHPF89, SMF+90a, SMF+90b, SHPF90, SPJ+91]. **Three** [HFMS92a, HFMS92b]. **Three-Dimensional** [HFMS92a, HFMS92b].

Using [FHMS91b, SFHM90].

Version [SFHM90, FBS88, FBS89]. **Very** [FHMS91b]. **Visual** [FAL+06].

World [Wit94].

References

Beebe:1994:BPG

[BF94] Nelson H. F. Beebe and Stefano Foresti. A bibliography of publications of *Gene H. Golub*. Technical report, Center for Scientific Computing, Department of Mathematics, University of Utah, Salt Lake City, UT 84112, USA, October 30, 1994. 30 pp. URL `http://www.math.utah.edu/pub/bibnet/authors/g/golub-gene-h.*`. This report is updated frequently.

Clementi:1989:MTC

[Cle89] E. Clementi, editor. *Modern Techniques in Computational Chemistry: MOTECC-89*. ESCOM Science Publishers B. V., PO Box 214, 2300 AE, Leiden, Netherlands, 1989. ISBN 90-72199-05-7. LCCN QD39.3.M3 M6 1989.

Clementi:1990:MTC

[Cle90] E. Clementi, editor. *Modern Techniques in Computational Chemistry: MOTECC-90*. ESCOM Science Publishers B. V., PO Box 214, 2300 AE, Leiden, Netherlands, 1990. ISBN 90-72199-07-3. LCCN QD39.3.M3 M6 1990.

Clementi:1991:MTC

[Cle91] E. Clementi, editor. *Modern Techniques in Computational Chemistry: MOTECC-91*. ESCOM Science Publishers B. V., PO Box 214, 2300 AE, Leiden, Netherlands, 1991. ISBN 90-

72199-10-3. LCCN QD39.3.M3 M63 1991.

Dongarra:1995:BPJ

[DBF95] Jack J. Dongarra, Nelson H. F. Beebe, and Stefano Foresti. A bibliography of publications of Jack J. Dongarra. Technical report, Center for Scientific Computing, Department of Mathematics, University of Utah, Salt Lake City, UT 84112, USA, January 15, 1995. 24 pp. URL `http://www.math.utah.edu/pub/bibnet/authors/d/dongarra-jack-j.*`. This report is updated frequently.

Foresti:2006:VCN

[FAL+06] Stefano Foresti, James Agutter, Yarden Livnat, Shaun Moon, and Robert Erbacher. Visual correlation of network alerts. *IEEE Computer Graphics and Applications*, 26(2):48–59, March/April 2006. CODEN ICGADZ. ISSN 0272-1716 (print), 1558-1756 (electronic).

Foresti:1988:MSM

[FBS88] S. Foresti, G. Brussino, and V. Sonnad. Multilevel solution method for the p-version of finite elements: Parallel implementation and comparison with other solution methods. Technical Report KGN-137, IBM Corporation, Center for Scientific & Engineering Computations, Dept. 48B/428, Neighborhood Road, Kingston NY 12401, 1988. This technical report is an extended version of a published paper [FBS89]. The IBM Kingston Center for Scientific & Engineering Computations was closed. Please contact the author at his present address.

Foresti:1989:MSM

[FBS89] S. Foresti, G. Brussino, and V. Sonnad. Multilevel solution method for the p-version of finite elements. *Computer Physics Communications*, 53(1–3):349–355, May 1989. CODEN CPHCBZ. ISSN 0010-4655 (print), 1879-2944 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0010465589901720`. The technical report [FBS88] is an extended version of this paper.

Foresti:1990:CPI

[FHMS90a] S. Foresti, S. Hassanzadeh, H. Murakami, and V. Sonnad. A comparison of preconditioned iterative solution techniques with rapid operator evaluation against direct solution methods. Technical Report KGN-216, IBM Corporation, Center for Scientific & Engineering Computations, Dept. 48B/428, Neighborhood Road, Kingston NY 12401, 1990. This technical report is an extended version of a published paper [FHMS91a]. The IBM Kingston Center for Scientific & Engineering Computations was closed. Please contact the author at his present address.

Foresti:1990:PII

[FHMS90b] S. Foresti, S. Hassanzadeh, H. Murakami, and V. Sonnad.

Parallel implementation of iterative solution techniques with rapid operator evaluation on shared memory machines. Technical Report KGN-217, IBM Corporation, Center for Scientific & Engineering Computations, Dept. 48B/428, Neighborhood Road, Kingston NY 12401, 1990. This technical report is an preliminary version of a published paper [FHMS93]. The IBM Kingston Center for Scientific & Engineering Computations was closed. Please contact the author at his present address.

Foresti:1991:CPI

[FHMS91a] S. Foresti, S. Hassanzadeh, H. Murakami, and V. Sonnad. A comparison of preconditioned iterative solution techniques with rapid operator evaluation against direct solution methods. *International J. Numer. Methods Engineering*, 32(5):1137–1144, 1991. The technical report [FHMS90a] is an extended version of this paper.

Foresti:1991:FEA

[FHMS91b] S. Foresti, S. Hassanzadeh, H. Murakami, and V. Sonnad. Finite element analysis of very large-scale structural problems using minimal memory. Technical Report USI-7, Utah Supercomputing Institute, 85 SSB, University of Utah, Salt Lake City, Utah 84112, USA, 1991.

Foresti:1992:PRO

[FHMS92] S. Foresti, S. Hassanzadeh, H. Murakami, and V. Sonnad. Parallel rapid operator for iterative finite element solvers on a shared memory machine. Technical Report USI-31, Utah Supercomputing Institute, 85 SSB, University of Utah, Salt Lake City, Utah 84112, USA, 1992. This technical report is an extended version of a published paper [FHMS93].

Foresti:1993:PRO

[FHMS93] S. Foresti, S. Hassanzadeh, H. Murakami, and V. Sonnad. Parallel rapid operator for iterative finite element solvers on a shared memory machine. *Parallel Computing*, 19:1–7, 1993. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic). The technical reports [FHMS90b] and [FHMS92] are extended versions of this paper.

Foresti:1994:PEE

[FHS94] S. Foresti, S. Hassanzadeh, and V. Sonnad. A parallel element-by-element method for large-scale computations with $h-p-$ finite elements. In Quarteroni et al. [QPKW94], pages 367–373. ISBN 0-8218-5158-6. LCCN QA402.2 .I55 1992.

Foresti:1987:PMS

[For87] S. Foresti. *Parallelizzazione di Metodi Spettrali Multigrid*. PhD thesis, Universita' di Pavia, Dipartimento di Matematica, 27100 Pavia, Italia, 1987. In Italian. Please contact the author at his present address.

Foresti:1993:MCR

[For93] S. Foresti. MasPar challenge report: Massively parallel implementation of large-scale finite element applications on the MasPar MP-1. Technical Report USI-44, Utah Supercomputing Institute, 85 SSB, University of Utah, Salt Lake City, Utah 84112, USA, 1993.

Flaherty:1989:AMP

[FPSV89] J. Flaherty, P. Paslow, M. Shepard, and J. Vasilakis, editors. *Adaptive Methods for Partial Differential Equations*. SIAM, Philadelphia, PA, USA, 1989. ISBN 0-89871-242-4. LCCN QA377 .A295 1989.

Foresti:1994:DMP

[FZ94] S. Foresti and L. Zeng. Distributed and massively parallel methods for the reconstruction of SPECT images. In Witten [Wit94]. To appear.

Foresti:1995:DMP

[FZ95] S. Foresti and L. Zeng. Parallel methods for the reconstruction of SPECT images. 1995. To appear.

Hassanzadeh:1990:MSF

[HFMS90] S. Hassanzadeh, S. Foresti, H. Murakami, and V. Sonnad. Minimal storage finite element solution of large-scale generalized eigenproblems. Technical Report KGN-219, IBM Corporation, Center for Scientific & Engineering Computations, Dept. 48B/428, Neighborhood Road, Kingston NY 12401, 1990. This technical report is a preliminary version of a published paper [HFMS92b]. The IBM Kingston Center for Scientific & Engineering Computations was closed. Please contact the author at his present address.

Hassanzadeh:1992:MSFa

[HFMS92a] S. Hassanzadeh, S. Foresti, H. Murakami, and V. Sonnad. Minimal storage finite element solution of large-scale three-dimensional elastodynamic problems. Technical Report USI-28, Utah Supercomputing Institute, 85 SSB, University of Utah, Salt Lake City, Utah 84112, USA, 1992. This technical report was published as [HFMS92b].

Hassanzadeh:1992:MSFb

[HFMS92b] S. Hassanzadeh, S. Foresti, H. Murakami, and V. Sonnad. Minimal storage finite element solution of large-scale three-dimensional elastodynamic problems. In *Computing in Civil Engineering and Geographic Information Systems Symposium: Proceedings of the Eighth Conference held in conjunction with A/E/C Systems '92, Hyatt Regency Dallas Hotel, Dallas, Texas, June 7-9, 1992*, pages ??–?? (of xv + 1243). American Society of Civil Engineers, Dallas, Texas, 1992. ISBN 0-87262-869-8. LCCN TA345 .C6437 1992. This paper supersedes the technical reports [HFMS92a] and [HFMS90].

Hassanzadeh:1989:MSMa

[HFS89a] S. Hassanzadeh, S. Foresti, and V. Sonnad. A multilevel solution method for the incompressible Navier-Stokes equations. Technical Report KGN-190, IBM Corporation, Center for Scientific & Engineering Computations, Dept. 48B/428, Neighborhood Road, Kingston NY 12401, 1989. This technical report is an extended version of a published paper [HFS89b]. The IBM Kingston Center for Scientific & Engineering Computations was closed. Please contact the author at his present address.

Hassanzadeh:1989:MSMb

[HFS89b] S. Hassanzadeh, S. Foresti, and V. Sonnad. A multilevel solution method for the incompressible Navier-Stokes equations. In Flaherty et al. [FPSV89], chapter 9, pages 115–124. ISBN 0-89871-242-4. LCCN QA377 .A295 1989. The technical report [HFS89a] is an extended version of this paper.

Hassanzadeh:1989:FEI

[HSF89] S. Hassanzadeh, V. Sonnad, and S. Foresti. Finite element implementation of boundary conditions for the pressure Poisson equation of incompressible flow. Technical Report KGN-184, IBM Corporation, Center for Scientific & Engineering Computations, Dept. 48B/428, Neighborhood Road, Kingston NY 12401, 1989. This technical report is an extended version of a published paper [HSF94] The IBM Kingston Center for Scientific & Engineering Computations was closed. Please contact the author at his present address.

Hassanzadeh:1994:FEI

[HSF94] S. Hassanzadeh, V. Sonnad, and S. Foresti. Finite element implementation of boundary conditions for the pressure Poisson equation of incompressible flow. *Int. J. Num. Meth. Fluids*, 18(11):1009–1019, 1994. The paper supersedes an earlier technical report [HSF89].

Clementi:1989:MID

[IBM89] IBM Corporation, Center for Scientific & Engineering Computations, Dept. 48B/428, Neighborhood Road, Kingston NY 12401. *MOTECC-89 Input/Output Documentation*, 1989. This manual is part of the MOTECC-89^{TM} software package.

Clementi:1990:MID

[IBM90] IBM Corporation, Center for Scientific & Engineering Computations, Dept. 48B/428, Neighborhood Road, Kingston NY 12401. *MOTECC-90 Input/Output Documentation*, 1990. This manual is part of the MOTECC-90^{TM} software package.

Clementi:1991:MID

[IBM91] IBM Corporation, Center for Scientific & Engineering Computations, Dept. 48B/428, Neighborhood Road, Kingston NY 12401. *MOTECC-91 Input/Output Documentation*, 1991. This manual is

part of the MOTECC-91^{TM} software package.

Quarteroni:1994:DDM

[QPKW94] A. Quarteroni, J. Periaux, Y. Kutnetsov, and O. Widlund, editors. *Domain decomposition methods in science and engineering: the sixth International Conference on Domain Decomposition, June 15-19, 1992, Como, Italy.* American Mathematical Society, Providence, RI, USA, 1994. ISBN 0-8218-5158-6. LCCN QA402.2 .I55 1992.

Sonnad:1990:MSS

[SFHM90] V. Sonnad, S. Foresti, S. Hassanzadeh, and H. Murakami. Minimal storage solution of large 3-D problems using rapid operator evaluation with the p-version of finite elements. Technical Report KGN-209, IBM Corporation, Center for Scientific & Engineering Computations, Dept. 48B/428, Neighborhood Road, Kingston NY 12401, 1990. The IBM Kingston Center for Scientific & Engineering Computations was closed. Please contact the author at his present address.

Foresti:1996:PLS

[SH96] Grant Gullberg Stefano Foresti, Larry Zeng and Ron Huesman. Parallel least squares estimates of 2-D SPECT image reconstructions on the SGI Power Challenge. *Lecture Notes in Computer Science*, 1184:256–261, 1996. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL `http://www.springerlink.com/content/p5p8872227050236/`.

Sonnad:1989:EFFa

[SHPF89] V. Sonnad, S. Hassanzadeh, R. Panda, and S. Foresti. The equations of fluid flow and their solution by finite element methods. In Clementi [Cle89], chapter 11, pages 459–498. ISBN 90-72199-05-7. LCCN QD39.3.M3 M6 1989.

Sonnad:1990:EFFb

[SHPF90] V. Sonnad, S. Hassanzadeh, R. Panda, and S. Foresti. The equations of fluid flow and their solution by finite element methods. In Clementi [Cle90], chapter 21, pages 947–982. ISBN 90-72199-07-3. LCCN QD39.3.M3 M6 1990.

XXX:1995:PSS

[SIA95] *Proceedings of the Seventh SIAM Conference on Parallel Processing for Scientific Computing, February 15-17, 1995, San Francisco.* SIAM, Philadelphia, PA, USA, 1995. To appear.

Sonnad:1990:EETa

[SMF+90a] V. Sonnad, H. Murakami, S. Foresti, S. Hassanzadeh, and B. Jiang. The equations of elasticity and their solution by finite element methods. In Clementi [Cle90], chapter 22, pages 983–1000. ISBN 90-72199-07-3. LCCN QD39.3.M3 M6 1990.

Sonnad:1990:EETb

[SMF+90b] V. Sonnad, H. Murakami, S. Foresti, S. Hassanzadeh, and B. Jiang. The equations of elasticity and their solution by finite element methods. In Clementi [Cle91], chapter 29, pages 1091–1108. ISBN 90-72199-10-3. LCCN QD39.3.M3 M63 1991.

Sonnad:1991:EFFc

[SPJ+91] V. Sonnad, R. Panda, B. Jiang, H. Murakami, S. Hassanzadeh, and S. Foresti. The equations of fluid flow and their solution by finite element methods. In Clementi [Cle91], chapter 28, pages 1055–1090. ISBN 90-72199-10-3. LCCN QD39.3.M3 M63 1991.

Witten:1994:PFW

[Wit94] M. Witten, editor. *Proceedings of the First World Congress on Computational Medicine, Public Health and Biotechnology, April 24-28, 1994, Austin, Texas*, 1994. To appear.