A Bibliography of Publications of Barry Francis Smith

Barry Francis Smith

Tel: ?n/a?
FAX: ?n/a?

E-mail: bsmith@mcs.anl.gov (Internet)

25 November 2011
Version 1.07

Abstract

This bibliography records publications of Barry Francis Smith.

Title word cross-reference

algorithm [DS89]. **algorithms** [DSW93].
analyze [DS89]. **antisymmetries** [DS89].

basis [WS90]. **boundary** [DS89].

case [DS89]. **Coarse** [CSZ94].

data [GS93].
data-structure-neutral [GS93].
decomposition [WS90]. **design** [GS93].
dimensions [Smi91]. **domain** [WS90].

elasticity [Smi92b]. **elliptic** [DS89].
Experiences [GS92]. **Extensible** [GS94].

Grids [CS93].

hierarchical [WS90].

implementation [Smi93].
interaction [DHH+88]. **iterative** [Smi92a].

libraries [GS93]. **linear** [GS93].

machines [DHH+88]. **matching** [CSZ94].
Meshes [CSZ94]. **Methods** [GS92].
multigrid [DS89].

neutral [GS93]. **Non** [CSZ94].
Non-matching [CSZ94].
numerics [DHH+88].

optimal [Smi92b]. **Overlapping** [GS92].

parallel [DS89]. **Portable** [GS94].
preconditioner [Smi92b]. **problem** [DS89].
problems [Smi91].

Scalable [GS94]. **Schwarz** [DSW93, GS92].
solution [GS93]. **sparse** [GS93].
structure [GS93].
substructuring [Smi92a].
symmetries [DS89]. **systems** [GS93].

three [Smi91].

Unstructured [CS93]. **Using** [DS89].

value [DS89].

References

Chan:1993:MDD

[CS93] Tony F. Chan and Barry F. Smith. Multigrid and domain decomposition on unstructured grids. Technical Report 93-42, UCLA, Dept. of Mathematics, 1993. To appear in the Proceedings of 1993 International Conference on Domain Decomposition.

Chan:1994:OSM

[CSZ94] Tony F. Chan, Barry F. Smith, and Jun Zou. Overlapping Schwarz methods on unstructured meshes using non-matching coarse grids. Technical Report 94-8, UCLA, Dept. of Mathematics, 1994.

Douglas:1988:INM

[DHH+88] Craig C. Douglas, Michael E. Henderson, Susumu Horiguchi, Willard L. Miranker, Barry F. Smith, and Andrew Winkler. The interaction of numerics and machines. *Informations-technik*, 30: 83–98, 1988.

Douglas:1989:USA

[DS89] Craig C. Douglas and Barry F. Smith. Using symmetries and antisymmetries to analyze a parallel multigrid algorithm: the elliptic boundary value problem case. *SIAM Journal on Numerical Analysis*, 26(6):1439–1461, December 1989. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Dryja:1993:SAI

[DSW93] Maksymilian Dryja, Barry F. Smith, and Olof B. Widlund. Schwarz analysis of iterative substructuring algorithms for problems in three dimensions. Technical Report MCS-P250-0791, Argonne National Laboratory, Argonne, IL, USA, 1993. Published in [DSW94].

Dryja:1994:SAI

[DSW94] Maksymilian Dryja, Barry F. Smith, and Olof B. Widlund. Schwarz analysis of iterative substructuring algorithms for elliptic problems in three dimensions. *SIAM Journal on Numerical Analysis*, 31(6):1662–1694, December 1994. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

Gropp:1992:EDD

[GS92] William D. Gropp and Barry F. Smith. Experiences with domain decomposition in three dimensions: Overlapping Schwarz methods. In *Domain Decomposition Methods in Science and Engineering*, pages 323–333. Amer.

Math. Soc., Providence, RI, USA, 1992. ISBN 0-8218-5158-6.

Gropp:1993:DDS

[GS93] William D. Gropp and Barry F. Smith. The design of data-structure-neutral libraries for the iterative solution of sparse linear systems. Technical Report MCS-P356-0393, Argonne National Laboratory, Argonne, IL, USA, 1993.

Gropp:1994:SEP

[GS94] William D. Gropp and Barry F. Smith. Scalable, extensible, and portable numerical libraries. In *Proceedings of Scalable Parallel Libraries Conference*, pages 87–93. IEEE, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

Smith:1991:DDA

[Smi91] Barry F. Smith. A domain decomposition algorithm for elliptic problems in three dimensions. *Num. Math*, 60:219–234, 1991.

Smith:1992:ISA

[Smi92a] Barry F. Smith. An iterative substructuring algorithm for problems in three dimensions. In Tony F. Chan, David E. Keyes, Gérard A. Meurant, Jeffrey S. Scroggs, and Robert G. Voigt, editors, *Fifth International Symposium on Domain Decomposition Methods for Partial Differential Equations*, pages 91–98 (of xiii + 623). SIAM, Philadelphia, PA, USA, 1992. ISBN 0-89871-288-2. LCCN QA402.2 .I57 1991.

Smith:1992:ODD

[Smi92b] Barry F. Smith. An optimal domain decomposition preconditioner for elasticity problems. *SIAM J. Sci. Stat. Comput.*, 13: 364–378, 1992.

Smith:1993:PII

[Smi93] Barry F. Smith. A parallel implementation of an iterative substructuring algorithm for problems in three dimensions. *SIAM J. Sci. Stat. Comput.*, 14:406–423, 1993.

Widlund:1990:DDA

[WS90] Olof B. Widlund and Barry F. Smith. A domain decomposition algorithm using a hierarchical basis. *SIAM J. Sci. Stat. Comput.*, 11:1212–1220, 1990.