ELSEVIER

Comput. Methods Appl. Mech. Engrg. 184 (2000) 525–528

Computer methods in applied mechanics and engineering

www.elsevier.com/locate/cma

Subject Index of Volume 184

Boundary layers
A contact algorithm for smoothed particle hydrodynamics, J. Campbell, R. Vignjevic and L. Libersky 49–65
A treatment of zero-energy modes in the smoothed particle hydrodynamics method, R. Vignjevic, J. Campbell and L. Libersky 67–85

Coupled problems
A distributed Lagrange multiplier/fictitious domain method for the simulation of flow around moving rigid bodies: application to particulate flow, R. Glowinski, T.-W. Pan, T.I. Hesla, D.D. Joseph and J. Periaux 241–267

Dynamics
Parallel strategies for crash and impact simulations, K. Brown, S. Attaway, S. Plimpton and B. Hendrickson 375–390
Dynamic load balancing in computational mechanics, B. Hendrickson and K. Devine 485–500

Elasticity
Parallel adaptive subspace correction schemes with applications to elasticity, M. Griebel and G. Zumbusch 303–332

Electromagnetic fields
Domain decomposition method for harmonic wave propagation: a general presentation, F. Collino, S. Ghanemi and P. Joly 171–211

Finite element and matrix methods
Finite element modelling of dissipative structures for nonequilibrium chemical reactions in fluid-saturated porous media, C. Zhao, B.E. Hobbs, H.B. Mühlhaus and A. Ord 1–14
A posteriori error estimates in finite element methods for general Friedrichs' systems, B. Achchab, A. Agouzal, J. Baranger and J.F. Maitre 39–47
A contact algorithm for smoothed particle hydrodynamics, J. Campbell, R. Vignjevic and L. Libersky 49–65
A treatment of zero-energy modes in the smoothed particle hydrodynamics method, R. Vignjevic, J. Campbell and L. Libersky 67–85
Combining Galerkin matrix perturbation with Taylor weak statement algorithms, S. Roy 87–98
Numerical implementation of two nonconforming finite element methods for unilateral contact, P. Hild 99–123
A distributed Lagrange multiplier/fictitious domain method for the simulation of flow around moving rigid bodies: application to particulate flow, R. Glowinski, T.-W. Pan, T.I. Hesla, D.D. Joseph and J. Periaux 241–267

PII: S0045-7825(00)00225-5

A hierarchical partition model for adaptive finite element computation, J.D. Teresco, M.W. Beall, J.E. Flaherty and M.S. Shephard 269–285
Multigrid on the interface for mortar mixed finite element methods for elliptic problems, M.F. Wheeler and I. Yotov 287–302
Parallel strategies for crash and impact simulations, K. Brown, S. Attaway, S. Plimpton and B. Hendrickson 375–390
Parallel DNS algorithms on unstructured grids, C. Evangelinos, S.J. Sherwin and G.E. Karniadakis 401–425
Automotive design applications of fluid flow simulation on parallel computing platforms, S.M. Rifai, J.C. Buell, Z. Johan and T.J.R. Hughes 449–466

Fluid mechanics
A domain decomposition preconditioner for an advection–diffusion problem, Y. Achdou, P. Le Tallec, F. Nataf and M. Vidrascu 145–170
A distributed Lagrange multiplier/fictitious domain method for the simulation of flow around moving rigid bodies: application to particulate flow, R. Glowinski, T.-W. Pan, T.I. Hesla, D.D. Joseph and J. Periaux 241–267
A scaled and minimum overlap restricted additive Schwarz method with application to aerodynamics, M. Sarkis and B. Koobus 391–400
Parallel DNS algorithms on unstructured grids, C. Evangelinos, S.J. Sherwin and G.E. Karniadakis 401–425
Parallel linear multigrid algorithms for the acceleration of compressible flow calculations, G. Carré, L. Fournier and S. Lanteri 427–448
Automotive design applications of fluid flow simulation on parallel computing platforms, S.M. Rifai, J.C. Buell, Z. Johan and T.J.R. Hughes 449–466
Completely parallel compressible flow simulations using adaptive unstructured meshes, P. Leyland and R. Richter 467–483

General Rayleigh-Ritz and Galerkin techniques
A posteriori error estimates in finite element methods for general Friedrichs' systems, B. Achchab, A. Agouzal, J. Baranger and J.F. Maitre 39–47
Automotive design applications of fluid flow simulation on parallel computing platforms, S.M. Rifai, J.C. Buell, Z. Johan and T.J.R. Hughes 449–466

Modern computer architecture
A domain decomposition preconditioner for an advection–diffusion problem, Y. Achdou, P. Le Tallec, F. Nataf and M. Vidrascu 145–170
Domain decomposition method for harmonic wave propagation: a general presentation, F. Collino, S. Ghanemi and P. Joly 171–211
Two-level domain decomposition methods with Lagrange multipliers for the fast iterative solution of acoustic scattering problems, C. Farhat, A. Macedo, M. Lesoinne, F.-X. Roux, F. Magoulès and A. de La Bourdonnaie 213–239
A hierarchical partition model for adaptive finite element computation, J.D. Teresco, M.W. Beall, J.E. Flaherty and M.S. Shephard 269–285
Parallel adaptive subspace correction schemes with applications to elasticity, M. Griebel and G. Zumbusch 303–332
The second generation FETI methods and their application to the parallel solution of large-scale linear and geometrically non-linear structural analysis problems, C. Farhat, K. Pierson and M. Lesoinne 333–374
Parallel strategies for crash and impact simulations, K. Brown, S. Attaway, S. Plimpton and B. Hendrickson 375–390
Parallel DNS algorithms on unstructured grids, C. Evangelinos, S.J. Sherwin and G.E. Karniadakis 401–425

Parallel linear multigrid algorithms for the acceleration of compressible flow calculations, G. Carré, L. Fournier and S. Lanteri 427–448
Automotive design applications of fluid flow simulation on parallel computing platforms, S.M. Rifai, J.C. Buell, Z. Johan and T.J.R. Hughes 449–466
Completely parallel compressible flow simulations using adaptive unstructured meshes, P. Leyland and R. Richter 467–483
Dynamic load balancing in computational mechanics, B. Hendrickson and K. Devine 485–500
Multifrontal parallel distributed symmetric and unsymmetric solvers, P.R. Amestoy, I.S. Duff and J.-Y. L'Excellent 501–520

Nonlinear mechanics
A scaled and minimum overlap restricted additive Schwarz method with application to aerodynamics, M. Sarkis and B. Koobus 391–400

Numerical solution procedures
Finite element modelling of dissipative structures for nonequilibrium chemical reactions in fluid-saturated porous media, C. Zhao, B.E. Hobbs, H.B. Mühlhaus and A. Ord 1–14
Combining Galerkin matrix perturbation with Taylor weak statement algorithms, S. Roy 87–98
Analytical solutions for mining induced horizontal stress in floors of coal mining panels, C. Zhao, B.K. Hebblewhite and J.M. Galvin 125–142
A distributed Lagrange multiplier/fictitious domain method for the simulation of flow around moving rigid bodies: application to particulate flow, R. Glowinski, T.-W. Pan, T.I. Hesla, D.D. Joseph and J. Periaux 241–267

Optimization
On simultaneous optimisation of smart structures – Part I: Theory, X. Liu and D.W. Begg 15–24
On simultaneous optimization of smart structures – Part II: Algorithms and examples, D.W. Begg and X. Liu 25–37

Singularity methods
Combining Galerkin matrix perturbation with Taylor weak statement algorithms, S. Roy 87–98

Solution of integral equations (*singularity method*)
Analytical solutions for mining induced horizontal stress in floors of coal mining panels, C. Zhao, B.K. Hebblewhite and J.M. Galvin 125–142

Solutions of ordinary and partial differential equations
A contact algorithm for smoothed particle hydrodynamics, J. Campbell, R. Vignjevic and L. Libersky 49–65
A treatment of zero-energy modes in the smoothed particle hydrodynamics method, R. Vignjevic, J. Campbell and L. Libersky 67–85
Two-level domain decomposition methods with Lagrange multipliers for the fast iterative solution of acoustic scattering problems, C. Farhat, A. Macedo, M. Lesoinne, F.-X. Roux, F. Magoulès and A. de La Bourdonnaie 213–239
Multigrid on the interface for mortar mixed finite element methods for elliptic problems, M.F. Wheeler and I. Yotov 287–302
A scaled and minimum overlap restricted additive Schwarz method with application to aerodynamics, M. Sarkis and B. Koobus 391–400

Structural mechanics
On simultaneous optimisation of smart structures – Part I: Theory, X. Liu and D.W. Begg 15–24
On simultaneous optimization of smart structures – Part II: Algorithms and examples, D.W. Begg and X. Liu 25–37
The second generation FETI methods and their application to the parallel solution of large-scale linear and geometrically non-linear structural analysis problems, C. Farhat, K. Pierson and M. Lesoinne 333–374
Parallel strategies for crash and impact simulations, K. Brown, S. Attaway, S. Plimpton and B. Hendrickson 375–390
Automotive design applications of fluid flow simulation on parallel computing platforms, S.M. Rifai, J.C. Buell, Z. Johan and T.J.R. Hughes 449–466

Systems of linear and nonlinear simultaneous equations
Two-level domain decomposition methods with Lagrange multipliers for the fast iterative solution of acoustic scattering problems, C. Farhat, A. Macedo, M. Lesoinne, F.-X. Roux, F. Magoulès and A. de La Bourdonnaie 213–239
Multigrid on the interface for mortar mixed finite element methods for elliptic problems, M.F. Wheeler and I. Yotov 287–302
Parallel adaptive subspace correction schemes with applications to elasticity, M. Griebel and G. Zumbusch 303–332
The second generation FETI methods and their application to the parallel solution of large-scale linear and geometrically non-linear structural analysis problems, C. Farhat, K. Pierson and M. Lesoinne 333–374
A scaled and minimum overlap restricted additive Schwarz method with application to aerodynamics, M. Sarkis and B. Koobus 391–400
Parallel linear multigrid algorithms for the acceleration of compressible flow calculations, G. Carré, L. Fournier and S. Lanteri 427–448
Completely parallel compressible flow simulations using adaptive unstructured meshes, P. Leyland and R. Richter 467–483
Multifrontal parallel distributed symmetric and unsymmetric solvers, P.R. Amestoy, I.S. Duff and J.-Y. L'Excellent 501–520

Thermal effects and thermodynamics
Finite element modelling of dissipative structures for nonequilibrium chemical reactions in fluid-saturated porous media, C. Zhao, B.E. Hobbs, H.B. Mühlhaus and A. Ord 1–14

Transport phenomena
A domain decomposition preconditioner for an advection–diffusion problem, Y. Achdou, P. Le Tallec, F. Nataf and M. Vidrascu 145–170

Wave motion
Domain decomposition method for harmonic wave propagation: a general presentation, F. Collino, S. Ghanemi and P. Joly 171–211
Two-level domain decomposition methods with Lagrange multipliers for the fast iterative solution of acoustic scattering problems, C. Farhat, A. Macedo, M. Lesoinne, F.-X. Roux, F. Magoulès and A. de La Bourdonnaie 213–239