

G. F. CAREY  
PUBLICATIONS

Journal Publications

Published

1. A Unified Approach to Three Finite Element Theories for Geometric Nonlinearity, *Journal of Computer Methods in Applied Mechanics and Eng.*, 4, 1, pp. 69-79, 1974.
2. Orthogonal Collocation on Finite Elements, *Journal of Chemical Engineering Science*, Vol. 30, pp. 587-596, 1975 (G. F. Carey and B. A. Finlayson).
3. A Mesh Refinement Scheme for Finite Element Computations, *Journal of Computer Methods in Applied Mechanics and Engineering*, Vol. 7, No. 1, pp. 93-105, 1976.
4. A Variational Formulation of the Compressible Through-Flow Problem, *Transactions of the ASME, Journal of Engineering for Power*, Vol. 98, No. 1, Series A, pp. 1-8, 1976 (G. C. Oates, C. J. Knight and G. F. Carey).
5. An Analysis of Finite Element Equations and Mesh Subdivision, Parts I and II, *Journal of Computer Methods in Applied Mechanics and Engineering*, Vol. 9, No. 2, pp. 165-179, 1976.
6. Temperature Computation for Temperate Lakes, *Applied Mathematical Modelling*, Vol. 2, pp. 41-48, 1978 (R. Walters, G. F. Carey and D. F. Winter).
7. Variational Principles for the Transonic Airfoil Problem, *Journal for computer Methods in Applied Mechanics and Engineering*, 13, 129-140, 1978.
8. Adaptive Refinement and Nonlinear Fluid Problems, *Journal of Computer Methods in Applied Mechanics and Engineering*, 17/18, pp. 541-560, 1979.
9. Gershgorin Theory for Stiffness & Stability of Evolution systems and Convection-diffusion, *Journal of Computer Methods in Applied Mechanics and Engineering*, 22, 23-48, 1980 (G. F. Carey and K. Sepehrnoori).
10. Efficient Solution of Nonlinear Time-Dependent Problems with Applications to Permafrost Modeling, *Journal Cold Regions Science and Technology*, 3, pp. 185-192, 1980 (L. J. Hayes and Graham F. Carey).
11. Mixed Operator Problems Using Least Squares Finite Element Collocation, *Journal of Computer Methods in Applied Mechanics and Engineering*, 22, pp. 121-130, 1980 (G. F. Carey, Y. K. Cheung and S. L. Lau).
12. Galerkin and Collocation-Galerkin Methods with Superconvergence and Optimal Fluxes, *International Journal of Numerical Methods in Engineering*, 17, pp. 939-950, 1981 (G. F. Carey, D. Humphrey and M. F. Wheeler).
13. Moisture Transport in a Soil-Plant System: A Mathematical Model and Finite Element Analysis, *Advances in Water Resources*, 4, pp. 67-76, 1981 (P. Farnum and G. F. Carey).

14. Numerical Integration of Semidiscrete Evolution Systems, *Journal of Computer Methods in Applied Mechanics and Engineering*, 27, 45-61, 1981 (K. Sepehrnoori and G. F. Carey).
15. On a Nonlinear Iterative Method in Applied Mechanics, Part I: Analysis, *Journal of Computer Methods in Applied Mechanics and Engineering*, 26, pp. 173-180, 1981 (G. F. Carey and R. Krishnan).
16. Mesh Refinement and Iterative Solution Methods for Finite Element Computations, *International Journal of Numerical Methods in Engineering*, 17, 1717-1734, 1981 (Graham F. Carey and David L. Humphrey).
17. Computation of Subcritical Compressible Flows, *Journal of Computers and Fluids*, 9, pp. 33-41, 1981 (G. F. Carey and T. T. Pan).
18. On Penalty Methods for Inter-Element Constraints, *J. Comp. Meth. Appl. Mech. Eng.*, 30, 151-171, 1982 (G. F. Carey, A. Kabaila and M. Utku).
19. Determination of Two Dominant Eigenvalues, *Applied Mathematical Modelling*, 6, 399-402, 1982 (A. Kabaila and G. F. Carey).
20. Boundary Penalty Techniques, *J. Comp. Meth. Appl. Mech. Eng.*, 30, 103-118, 1982 (M. Utku and G. F. Carey).
21. Penalty Approximation of Stokes Flow, Parts I and II, *J. Comp. Meth. Appl. Mech. and Eng.*, 35, 2, 169-206, 1982 (G. F. Carey and R. Krishnan).
22. On a Nonlinear Iterative Method in Applied Mech., Part II: Computational Aspects, *Journal of Computer Methods in Applied Mechanics and Engineering*, 30, 323-333, 1982 (G. F. Carey and R. Krishnan).
23. Hyperbolic Heat Transfer with Reflection, *J. Numerical Heat Transfer*, 5, 309-327, 1982 (G. F. Carey and M. Tsai).
24. C1-Collocation and Continuity Requirements, *Applied Mathematical Modelling*, 6, 70-71, 1982.
25. Derivative Calculation from Finite Element Solutions, *J. Comp. Meth. Appl. Mech. and Eng.*, 35, 1-14, 1982.
26. Analysis of Spurious Oscillation Modes for the Shallow Water and Navier Stokes Equations, *J. Comp. and Fluids*, 11, 1, 51-68, 1983 (Roy A. Walters and Graham F. Carey).
27. Lifting Airfoil Calculation Using the Boundary Element Method, *Int. J. Numer. Meth. Fluids*, 3, 481-492, 1983 (G. F. Carey and S. W. Kim).
28. Variable Upwinding and Adaptive Mesh Refinement in Convection-Diffusion, *International Journal of Numerical Methods in Engineering*, 19, 341-353, 1983 (G. F. Carey and T. Plover).
29. Penalty Resolution of the Babuska-Circle Paradox, *J. Comp. Meth. Appl. Mech. Eng.*, 41, 11-28, 1983, (M. Utku and G. F. Carey).
30. Isothermal, Multiphase, Multicomponent Fluid Flow in Permeable Media: Part I-Theory, *In Situ*, 1984, (L. Lake, G. Pope, G. F. Carey and K. Sepehrnoori).

- Isothermal, Multiphase, Multicomponent Fluid Flow in Permeable Media: Part 2- Numerical Modelling, In Situ, 1984, (G. Pope, G. F. Carey and K. Sepehrnoori).
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  32. Penalty Finite Element Method for the Navier Stokes Equations, *Comp. Meth. Appl. Mech. Eng.*, Parts I, II, 42, 183-224, 1984 (G. F. Carey and R. Krishnan).
  33. Stream Function Finite Element Solution of Stokes Flow with Penalties, *Int. J. Numer. Meth. Fluids*, 4, 1013-1025, 1984, (Graham F. Carey and Mehmet Utku).
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  35. On the Computed Pressures for Navier Stokes Problems at Increasing Reynolds Numbers Using the Penalty Finite Element Method, *Int. J. Numer. Meth. Fluids*, 5, 439-442, 1985 (R. Krishnan and G. F. Carey).
  36. Exponential Upwinding and Integrating Factors for Symmetrization, *Communications in Applied Numerical Methods*, 1, 57-60, April 1985.
  37. Continuation Techniques for a Penalty Approximation of the Navier-Stokes Equations, *J. Comp. Meth. in Applied Mech. and Eng.*, 48, 265-282, 1985, (G. F. Carey and R. Krishnan).
  38. Some Results Concerning Approximation of Regularized Compressible Flow, *Int. J. Numer. Meth. Fluids*, 5, 299-302, March 1985, (Hung Dinh and Graham F. Carey).
  39. On the Numerical Solution of Two-Point Singularly Perturbed Boundary-Value Problems, *Comp. Meth. in Applied Mech. and Eng.*, 50, 217-229, 1985, (with O. Axelsson and G. F. Carey).
  40. Grading Functions and Mesh Redistribution, *SIAM J. Numer. Anal.*, 50, No. 5, 1028-1040, 1985, (Graham F. Carey and Hung T. Dinh).
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51. Treatment of Material Discontinuities in Finite Element Computations, *IJNME*, 24, 393-417, 1987 (R. MacKinnon and G. F. Carey).
52. Stream Function Solution of Navier-Stokes Problems with Inter-Element Penalties, *Int. J. Num. Meth. Fluids*, 7, 191-193, 1987, (M. Utku and G. F. Carey).
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118. A Domain Decomposition Strategy for Finite Element Simulation of Phase Change, *Numerical Heat Transfer, Part B*, Vol 24, No. 2, 181-189, 1993 (S. Runnels and G. F. Carey).

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