Applied Mathematical Sciences

- 1. John: Partial Differential Equations, 4th ed.
- 2. Sirovich: Techniques of Asymptotic Analysis.
- 3. *Hale:* Theory of Functional Differential Equations, 2nd ed.
- 4. Percus: Combinatorial Methods.
- 5. von Mises/Friedrichs: Fluid Dynamics.
- Freiberger/Grenander: A Short Course in Computational Probability and Statistics.
- 7. Pipkin: Lectures on Viscoelasticity Theory.
- 8. *Giacoglia:* Perturbation Methods in Non-linear Systems.
- Friedrichs: Spectral Theory of Operators in Hilbert Space.
- 10. Stroud: Numerical Quadrature and Solution of Ordinary Differential Equations.
- 11. Wolovich: Linear Multivariable Systems.
- 12. Berkovitz: Optimal Control Theory.
- Bluman/Cole: Similarity Methods for Differential Equations.
- Yoshizawa: Stability Theory and the Existence of Periodic Solution and Almost Periodic Solutions.
- Braun: Differential Equations and Their Applications, 3rd ed.
- 16. Lefschetz: Applications of Algebraic Topology.
- 17. Collatz/Wetterling: Optimization Problems.
- 18. Grenander: Pattern Synthesis: Lectures in Pattern Theory, Vol. I.
- Marsden/McCracken: Hopf Bifurcation and Its Applications.
- Driver: Ordinary and Delay Differential Equations.
- Courant/Friedrichs: Supersonic Flow and Shock Waves
- 22. Rouche/Habets/Laloy: Stability Theory by Liapunov's Direct Method.
- Lamperti: Stochastic Processes: A Survey of the Mathematical Theory.
- Grenander: Pattern Analysis: Lectures in Pattern Theory, Vol. II.
- 25. Davies: Integral Transforms and Their Applications, 2nd ed.
- Kushner/Clark: Stochastic Approximation Methods for Constrained and Unconstrained Systems.
- 27. de Boor: A Practical Guide to Splines.
- 28. *Keilson:* Markov Chain Models—Rarity and Exponentiality.
- 29. de Veubeke: A Course in Elasticity.
- 30. Shiatycki: Geometric Quantization and Quantum Mechanics.
- Reid: Sturmian Theory for Ordinary Differential Equations.
- 32. *Meis/Markowitz:* Numerical Solution of Partial Differential Equations.
- 33. *Grenander:* Regular Structures: Lectures in Pattern Theory, Vol. III.

- 34. *Kevorkian/Cole*: Perturbation Methods in Applied Mathematics.
- 35. Carr: Applications of Centre Manifold Theory.
- Bengtsson/Ghil/Källén: Dynamic Meteorology: Data Assimilation Methods.
- Saperstone: Semidynamical Systems in Infinite Dimensional Spaces.
- 38. *Lichtenberg/Lieberman*: Regular and Chaotic Dynamics, 2nd ed.
- Piccini/Stampacchia/Vidossich: Ordinary Differential Equations in Rⁿ.
- 40. Naylor/Sell: Linear Operator Theory in Engineering and Science.
- 41. *Sparrow:* The Lorenz Equations: Bifurcations, Chaos, and Strange Attractors.
- Guckenheimer/Holmes: Nonlinear Oscillations, Dynamical Systems, and Bifurcations of Vector Fields
- 43. Ockendon/Taylor: Inviscid Fluid Flows.
- 44. Pazy: Semigroups of Linear Operators and Applications to Partial Differential Equations.
- 45. Glashoff/Gustafson: Linear Operations and Approximation: An Introduction to the Theoretical Analysis and Numerical Treatment of Semi-Infinite Programs.
- Wilcox: Scattering Theory for Diffraction Gratings.
- Hale et al: An Introduction to Infinite
 Dimensional Dynamical Systems—Geometric
 Theory.
- 48. Murray: Asymptotic Analysis.
- 49. *Ladyzhenskaya:* The Boundary-Value Problems of Mathematical Physics.
- 50. Wilcox: Sound Propagation in Stratified Fluids.
- 51. Golubitsky/Schaeffer: Bifurcation and Groups in Bifurcation Theory, Vol. I.
- Chipot: Variational Inequalities and Flow in Porous Media.
- Majda: Compressible Fluid Flow and System of Conservation Laws in Several Space Variables.
- 54. Wasow: Linear Turning Point Theory.
- Yosida: Operational Calculus: A Theory of Hyperfunctions.
- Chang/Howes: Nonlinear Singular Perturbation Phenomena: Theory and Applications.
- 57. *Reinhardt:* Analysis of Approximation Methods for Differential and Integral Equations.
- 58. Dwoyer/Hussaini/Voigt (eds): Theoretical Approaches to Turbulence.
- Sanders/Verhulst: Averaging Methods in Nonlinear Dynamical Systems.
- Ghil/Childress: Topics in Geophysical Dynamics: Atmospheric Dynamics, Dynamo Theory and Climate Dynamics.

(continued following index)