Numerical Analysis References List

K. Atkinson: An Introduction to Numerical Analysis, Wiley, (2nd ed.), 1989.

P.G. Ciarlet and J. L. Lions (eds), Handbook of Numerical Analysis, North Holland, 1990.

H. Keller: Analysis of Numerical Methods, Wiley, 1966 (or Dover 1994).

D. Kahaner, C. Moler, and S. Nash: Numerical Methods and Software, Prentice-Hall, 1989.

D. Kincaid and W. Cheney: Numerical Analysis: Mathematics of Scientific Computing, American Mathematical Society, 3rd edition, 2001.

Solution of Nonlinear Systems of Equations and Optimization

J. E. Dennis and J. More: Quasi-Newton methods, motivation, and theory, SIAM Review, vol 19 #1, Jan. 1977.

J. E. Dennis and R. B. Schnabel: Numerical Methods for Unconstrained Optimization and Nonlinear Equations, Prentice-Hall, 1983, SIAM, 1996.

Finite Difference Methods for Two-Point Boundary Value Problems and Partial Differential Equations

S. K. Godunov and V. S. Ryabenki, Difference Schemes: an introduction to the underlying theory, North Holland, 1987.

C. Grossmann, H-G. Roos, and M. Stynes: Numerical Treatment of Partial
   Equations, Second Edition, SIAM, 2004.

MATLAB

T. Davis and K. Sigmon: MATLAB Primer, Seventh Edition, Chapman and Hall, 2004.

D. J. Higham and N. J. Higham: MATLAB Guide, Second Edition, SIAM, 2005.