Errors (third printing, to be fixed in fourth printing) **Iterative Methods for Linear and Nonlinear Equations**

C. T. Kelley, September 18, 2010

The 4th printing should take place in late 2001. I must have the corrections in the publisher's hands by March 28. Please send me more errors!

page 5 line -6, change "an matrix" to "a matrix"

- page 11 line 5, change "iteration some" to "iteration, some"
- page 34 line 10, change "the GMRES iteration" to "the GMRES iteration, with $x_0 = 0$,"
- page 50 Step 1 of Algorithm 3.6.3, change $\rho = \alpha = \omega_0 = 1$ to $\rho = \alpha = \omega = 1$
- page 65 line 7, change "components of f" to "components of F"
- page 69 line 13, should "Lemma 4.3.1. is an" be changed to "Lemma 4.3.1 is an"? (ie is the dot after the 1 supposed to be there?)
- page 72 the period is missing from the last line in the first paragraph in $\S5.2$.
- page 91 In the last line of exercise 5.7.4, "q-factor" should be "q-order".
- page 98 line -5, change "that a choices" to "that choices".
- page 97 line 10, change $K_{\eta} 2 \|F'(x^*)\|$ to $K_{\eta} 2^p \|F'(x^*)\|^p$
- page 100 line following equation 6.10, change " $x_+ = x_c + s$ then" to " $x_+ = x_c + s$, then"
- page 103 line 11, change " $\{\eta_n\}$ but" to " $\{\eta_n\}$, but"
- 105 in equation 6.19, change $\gamma \eta_{n-1}^2 < .1$ to $\gamma \eta_{n-1}^2 \leq .1$
- page 113 line 9, change "cheaper that" to "cheaper than" line 10, change "that that" to "than that"
- page 117 line -9, change (η_n, ψ_n) to $(\eta_n^T \psi_n)$
- page 117 line 9, change (η_n, ψ_n) to (η_n, ψ_n) page 118 line 4, change $|\psi_n||_2$ to $||\psi_n||_2$
- page 116 line 4, change $|\psi_n||_2$ to $||\psi_n||_2$ page 128 line -6, change c = .999 to c = .9999
- page 120 mile 0, change c = .555 to c = .5555page 132 exercise 7.5.3, change "if B is a nonsingular" to "if A is a nonsingular"
- page 132 exceeds 7.5.5, enable if *B* is a nonsingular to if *H* is a nonsingular page 139 line -19, change " $||F'(x_n)||^{-1}$ are bounded" to $\{||F'(x_n)^{-1}||\}$ are bounded"
- page 139 line -19, change $||T(x_n)||$ are bounded to $\{||T(x_n)||\}$ are bounded
- page 153 I think entry 14 in the bibliography has an error. The journal is "Astron. Astrophys.", not "Astron. Astrophys. Lib."
- page 161 The title of entry 191 in the bibliography is wrong. "nonlinear" should be "nonsymmetric"