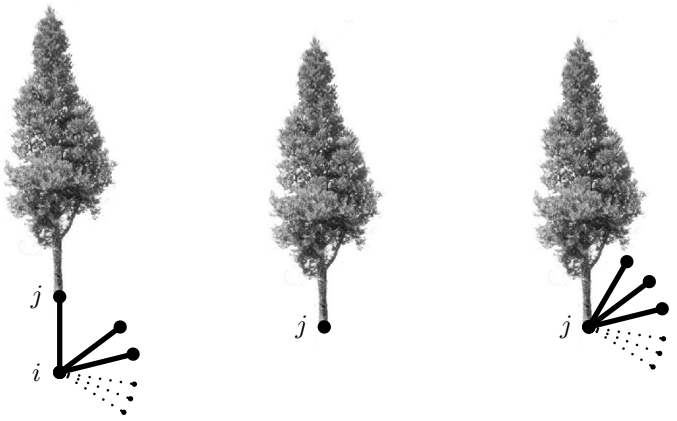
Errors and Corrections

Original Text	Corrected Text
Page 16, Line 1	
from C from B	of C from B
Page 23, Line 2	
$H(p,q) = \frac{1}{2}p^2 + \sin(q)$	$H(p,q) = \frac{1}{2}p^2 - \cos(q)$
Page 73, Line 11	
$y(\widehat{x}_n)$	$\widehat{y}(x_n)$
Page 100, Line 11	
move	more
Page 124, Figure 300(i), Third graph	
$\{[1,2],[1,3],[3,4],[4,5]\}$	$\{[1,2],[1,3],[3,4],[3,5]\}$
Page 128, Line 17	
it can be seen that that	it can be seen that
Page 128, Line -5	
$k - r(\widetilde{t})$	$k - r(\widehat{t})$
Page 137, Table 310(II), Line -8	
5 6 $\mathbf{f}^{(4)}(\mathbf{f},\mathbf{f},\mathbf{f},\mathbf{f})$ $f^i_{jkl}f^jf^kf^l_mf^m$	5 6 $\mathbf{f}^{(3)}(\mathbf{f},\mathbf{f},\mathbf{f}'\mathbf{f})$ $f^i_{jkl}f^jf^kf^l_mf^m$
Page 137, Table 310(II), Line -7	
5 4 $\mathbf{f}''(\mathbf{f},\mathbf{f}'(\mathbf{f},\mathbf{f}))$ $f^i_{jk}f^jf^k_{lm}f^lf^m$	5 4 $\mathbf{f}''(\mathbf{f},\mathbf{f}''(\mathbf{f},\mathbf{f}))$ $f^i_{jk}f^jf^k_{lm}f^lf^m$
Page 137, Table 310(II), Line -5	
5 3 $\mathbf{f}''(\mathbf{f}'\mathbf{f},\mathbf{f}'\mathbf{f})$ $f^i_{jk}f^j_kf^kf^l_mf^m$	5 3 $\mathbf{f}''(\mathbf{f}'\mathbf{f},\mathbf{f}'\mathbf{f})$ $f^i_{jk}f^j_lf^lf^k_mf^m$
Page 153, Line -17	
$\cdots hL\sum_{j=1}^s |b_i|\|Y_j - Z_j\|,$	$\cdots hL\sum_{j=1}^s |b_j|\|Y_j - Z_j\|,$
Page 160, Line 3	
$\Phi(t_1)$	$\Phi(t_3)$
Page 160, Figure 321(ii)	
Replace the figure by the following:	



Page 160, Line 5

$\sum_i b_i c_j^{k-1} a_{ij}$

$\sum_i b_i c_i^{k-1} a_{ij}$

Page 160, Line 6

$b_j c_j^{k-1}$

b_j

Page 164, Line 6

six

five

Page 170, Line 5

c

c_i

Page 170, Line 8

c

c_i

Page 170, Line 8

$\widehat{b}_i$

$\widetilde{b}_i$

Page 170, Line 13

$\sum_{i,j=1}^{s} b_i \frac{c_i^{r(t)}}{\gamma(t)}$

$\sum_{i=1}^{s} b_i \frac{c_i^{r(t)}}{\gamma(t)}$

Page 170, line -6

$\sum_{i=j}^{s} \widetilde{b}_j \chi_j$

$\sum_{j=1}^{s} \widetilde{b}_j \chi_j$

Page 174, 2nd table

0	$\frac{7}{90}$	0	$\cdots$

	$\frac{7}{90}$	0	$\cdots$

Page 174, 3rd table

$\frac{4}{5}$	$\frac{7}{30}$	$\frac{3}{5}$	$-\frac{1}{6}$	$\frac{2}{15}$	0	
	$\frac{1}{4}$	0	$\frac{125}{192}$	0	$-\frac{27}{64}$	$\frac{25}{48}$

$\frac{4}{5}$	$\frac{2}{25}$	$\frac{12}{25}$	$\frac{2}{15}$	$\frac{8}{75}$	0	
	$\frac{23}{192}$	0	$\frac{125}{192}$	0	$-\frac{27}{64}$	$\frac{125}{192}$

Page 176, Line 5,6

$\sum_{j=1}^{s}$

$\sum_{j=1}^{7}$

Page 176, Line 10

$\sum_{i=1,j}^{7}$

$\sum_{i,j=1}^{7}$

Page 177, Line -5

$(c_i - c_6)$ $(c_i - c_5)$

Page 187, Line 16

$\sum_{i=1}^{s} \sum_{j=1}^{s-1} b_i a_{ij}(1 - c_j)\chi_j(t)$ $\sum_{i=1}^{s} \sum_{j=1}^{s-1} b_i a_{ij}\chi_j(t)$

Page 193, Line 18

together with a seventh together with a sixth

Page 197, Line -10

$|h| \sum_{j=1}^{s} |a_{ij}|L||Y_j - \bar{Y}_j||$ $|h| max_{i=1}^{s} \sum_{j=1}^{s} |a_{ij}|L||Y_j - \bar{Y}_j||$

Page 199, Line 1

$k < n - 1$ $k < n - 2$

Page 200, Line 7

(342j) (342i)

Page 201, Line 3

t^{k-1} τ^{k-1}

Page 204, Line 8

(343l) no (343l)

Page 205, Line -10

polynomials polynomial

Page 225, **Remark 354C**

$\{r \exp(i(j + \frac{1}{2})\pi/(p + 1) : 0 \leq r\}$ $\{r \exp(i(j + \frac{1}{2})\pi/(p + 1)) : 0 \leq r\}$

Page 229, Line 12

$$Z = \begin{bmatrix} hq(x_{n-1} + c_1) & 0 & \cdots & 0 \\ 0 & hq(x_{n-1} + c_1) & \cdots & 0 \\ \vdots & \vdots & & \vdots \\ 0 & 0 & \cdots & hq(x_{n-1} + c_s) \end{bmatrix}$$

$$= \text{diag}([hq(x_{n-1} + c_1) \;\; hq(x_{n-1} + c_2) \;\; \cdots \;\; hq(x_{n-1} + c_s)])$$

$$Z = \begin{bmatrix} hq(x_{n-1} + c_1 h) & 0 & \cdots & 0 \\ 0 & hq(x_{n-1} + c_2 h) & \cdots & 0 \\ \vdots & \vdots & & \vdots \\ 0 & 0 & \cdots & hq(x_{n-1} + c_s h) \end{bmatrix}$$

$$= \text{diag}([hq(x_{n-1} + c_1 h) \;\; hq(x_{n-1} + c_2 h) \;\; \cdots \;\; hq(x_{n-1} + c_s h)])$$

Page 270, Line 17

$\widehat{E} \times \widehat{E}$ $\widehat{V} \times \widehat{V}$

Page 273, Line -10

$\{1, 2, \ldots, \widetilde{s}\}^n$ $\{1, 2, \ldots, \widetilde{s}\}$

Page 310, Theorem 406D

A-stable consistent

A stable consistent

Page 333, Line 3

Adams-Bashforth as correcter

Adams-Moulton as corrector

Page 337, Line 4

$\log\left(\frac{1+z}{1-z}\right)$

$\frac{2z}{1-z}$

Page 337, Line 6

$-\log\left(\frac{1-z}{1+z}\right)(1+z)^k\beta\left(\frac{1+z}{1-z}\right)$

$-\log\left(\frac{1+z}{1-z}\right)(1+z)^k\beta\left(\frac{1-z}{1+z}\right)$

Page 351, Line 3

the a stepsize

a stepsize

Page 352, Second vector in (461e)

$\begin{bmatrix} \vdots \\ \gamma_{p-1} \\ \gamma_{p-2} \end{bmatrix}$

$\begin{bmatrix} \vdots \\ \gamma_{p-1} \\ \gamma_p \end{bmatrix}$

Page 360, Line -9

$\frac{1}{2} \mid \frac{5}{12} \quad \frac{1}{3} \quad -\frac{1}{12}$

$\frac{1}{2} \mid \frac{5}{24} \quad \frac{1}{3} \quad -\frac{1}{24}$

Page 375, Line 6

$\widehat{y}_i^{[n-1]}$

$\widehat{y}^{[n-1]}$

Page 379, Line 2

$\sum_{k=1}^{s}(\delta_{jk} - h_0 L|a_{jk})\eta_k \leq ...$

$\sum_{k=1}^{s}(\delta_{jk} - h_0 L|a_{jk}|)\eta_k \leq ...$

Page 379, Line 4

$||\widetilde{Y}_j - Y_j|| \leq h\bar{\epsilon}_j \max_{k=1}^{r} ||....$

$||\widetilde{Y}_j - Y_j|| \leq h\bar{\epsilon}_j \max_{k=1}^{s} ||....$

Page 380, Theorem 515D

A-stable and consistent ...

A stable and consistent ...

Page 390, Line -6

freeθ

free θ

Page 398, Line 11

... for which $P(w, z)$ factorizes...

....for which $\Phi(w, z)$ factorizes...

Thanks to *Ian Gladwell, Allison Heard, Dawoomi Kim, Yoshio Komori, René Lamour, Dione O'Neale, Christian Perret, Higinio Ramos, Steve Stalos, Caren Tischendorf, Priscilla Tse, Frank Wrona, Jinsen Zhuang.*