

Some corrections of  
**Geometric Numerical Integration**  
 Second Edition 2006, Printing 2010  
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- p. 23, second formula for  $M(h\omega)$ : remove factor  $\frac{1}{2}$  in the non-diagonal elements
- p. 36, l. 17: replace  $k_1 = f(y_0)$  by  $k_1 = f(t_0, u(t_0))$ .
- p. 48, l. 22: replace “eventually” by “possibly”.
- p. 88, proof of Lemma 5.1: replace  $\exp(tD_2)\text{Id}(y_0)$  by  $\exp(tD_2)\text{Id}(y)$ .
- p. 91, four lines after (5.15): replace  $[E_2^1, \alpha_1^3]$  by  $[E_2^1, E_1^3]$ .
- p. 111 (middle): remove the factor 2 in the denominator of the last term in the Hamiltonian.
- p. 190, formula (3.5): replace  $H_p$  by  $H_q$  (twice) and  $H_q$  by  $H_p$  (also twice).
- p. 220, l. -8: ... where  $k = f(y_0 + (h/2)k)$ , and ...
- p. 309, Figure 2.1: replace “function (3.6)” by “function (2.7)”, “function (3.7)” by “function (2.8)”.
- p. 367, l. -8: ... we get the bound

$$\|f(p, q)\| \leq \sqrt{(c + 2R)^2 + e^{4R}}$$

for  $\|(p, q) - (p_0, q_0)\| \leq 2R$  and  $(p_0, q_0) \in K$ . If we choose  $c \leq 2$ ,  $R = 1/2$ , and  $M = 4.05$ , the value  $h_0$  of Theorem 7.6 is given by  $h_0 = 1/(8.1 e \eta) \approx 0.009$  for the methods ...

- p. 578, l. -7:  $(D_j \Psi)(y, v) = \Psi_y(y, v) f_j(y, v) + \Psi_v(y, v) g_j(y, v)$
- p. 581, formula (2.11):  $2h \text{sinc}(h\Omega) \dot{x}_n = x_{n+1} - x_{n-1}$
- p. 584, l. -4: ... and  $h\dot{z}_\ell(0)$  as ...
- p. 590, l. -6: ... we use  $\dot{y}^T \ddot{y} = \frac{1}{2} \frac{d}{dt} (\dot{y}^T \dot{y})$  and
- p. 591, formula (4.19): replace  $D$  with  $E$
- p. 594, formula (5.9): replace  $z_0$  with  $z_1$ , and notice that  $\ell_j \neq 1$
- p. 595, line after formula (5.15): ... apply the relation (4.15) for the real function

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