

# Errata

P.S.C. Heuberger, P.M.J. Van den Hof and B. Wahlberg (Eds.)  
 Modelling and Identification with Rational Orthogonal Basis Functions  
 Springer Verlag, 2005, ISBN 1-85233-956-X

Remark: This list will be updated regularly  
 Created: December 14, 2005  
 Last update: February 22, 2008  
 Contact: p.s.c.heuberger@tue.nl

## Page:

- 20** Line 2,  $|G_b(e^{\omega})| = 1$  should read:  $|G_b(e^{i\omega})| = 1$ .
- 35** Subsection 2.6.2, Line 8,  $N_0(k) = D_0(k) = 1$  should read:  $N_0(z) = D_0(z) = 1$ .
- 35** Equation (3.36) should read:  $V_1^T(z_i)V_1(1/z_j) = \frac{G_b(z_i)G_b(1/z_j)-1}{1-z_i z_j} = 0$ .
- 63** In the equation above (4.2),  $[1 - H_0(q)]^{-1}$  should be replaced by  $[1 - H_0(q)^{-1}]$ .
- 63** In equation (4.2),  $[1 - H(q, \theta)]^{-1}$  should be replaced by  $[1 - H(q, \theta)^{-1}]$ .
- 67** Line 3,  $(1 - H(q, \theta))^{-1}$  should be replaced by  $(1 - H(q, \theta)^{-1})$ .
- 67** In the equation preceding (4.10),  $[1 - H(q, \theta)]^{-1}$  should be replaced by  $[1 - H(q, \theta)^{-1}]$ .
- 67** In three equations the summation  $\sum_{k=1}^{n_b}$  should be replaced by  $\sum_{k=0}^{n_b}$ .
- 73** In equation (4.21),  $\Phi_N^T$  should be replaced by  $\Phi_N$ .
- 74** Equation (4.22) should be replaced by  $E\{\widehat{\theta}_N\} = \theta_0 + E\{[\frac{1}{N}\Phi_N^T\Phi_N]^{-1}\frac{1}{N}\Phi_N^T\mathbf{W}_N\}$
- 74** In Equation (4.25) the expression  $\sigma_e^2 \cdot R_\star$  has to be read:  $\frac{\sigma_e^2}{N} \cdot R_\star^{-1}$ .  
 In the same equation, in the expression for  $R_\star$  the expected value  $E$  should be removed.
- 78** Line 5,  $\Phi$  should be replaced by  $\Phi_u$ .
- 79** In Equation (4.38)  $R(n)$  should be replaced by  $R_n$ .
- 80** Middle of the page, in the equation  $\theta_e$  should be replaced by  $-\theta_e$ .
- 83** Equation (4.47) should read:  $\rho := \max_j \prod_{k=1}^n \left| \frac{p_j^0 - \xi_k}{1 - p_j^0 \xi_k^*} \right|$ .

- 85** In the equation in the middle of the page,  $\Gamma^*$  should be replaced by  $\Gamma^*$ .
- 88** Equation (4.53), the left hand side of the arrow should read  $\text{Var}\{G(e^{i\omega}, \widehat{\theta}_N)\}$ .
- 89** Equation (4.54), the left hand side of the arrow should read  $\text{Var}\{G(e^{i\omega}, \widehat{\theta}_N)\}$ .
- 94** Equation (4.71),  $K_1, K_1$  should be replaced by  $K_1, K_2$  and similarly for  $F_1$ .
- 95** Last line -2,  $D_n(q)$  should be replaced by  $D_n(q^{-1})$ .
- 96** Equations (4.74) and (4.77),  $\text{Var}\{\widehat{G}(e^{i\omega})\}$  should be  $\text{Var}\{\widehat{G}(e^{i\omega})\}$ .
- 100** Line 8,  $\sigma_v^2$  should be replaced by  $\sigma^2$ .
- 101** In the equation in the middle of the page, the left hand side should be replaced by  $\varepsilon(t, \theta)$ , and on the right hand side  $u(t)$  should be replaced by  $u(t)$ . In the line of text following the equation, “linear” should be replaced by “affine”.
- 270** The equation in the middle, should read:  $\Omega \subset \{z \in \mathbb{C} \mid \prod_{i=1}^{n_b} \left| \frac{z - \xi_i}{1 - \xi_i^* z} \right| \leq \rho\}$ .