

## ERRATA SHEET

### MHG: The unsymmetric Lanczos algorithms and their relations ...

- p. 12, Eq. (2.32):  $n = 0, 1, \dots, \nu$  read:  $n = 0, 1, \dots, \nu - 1$
- p. 15, line -8:  $z_0 := b - Ax_0$  read:  $u_0 := x_0 := b - Az_0$
- p. 18, line -7: *delete:* , in order to avoid ... in BIOMIN
- p. 19, line 4:  $nu'$  read:  $\nu'$
- p. 19, THEOREM 3.5: (iii')  $\delta_n = 0$  in BIORES read: (iii')  $\delta_n = 0$  in BIORES and  $\dot{\nu} = \nu$
- p. 19, THEOREM 3.5: (ii'')  $\delta'_n = 0$  in BIODIR read: (ii'')  $\delta'_n = 0$  in BIODIR and  $\dot{\nu} = \nu'$
- p. 31, line 12:  $D\lambda$  read:  $D_\lambda$
- p. 48, line -3: *delete:* ,  $q_0 := o \in \mathbf{C}^N$ ,  $\psi_0 := 0$
- p. 50, Eq. (7.20e):  $Aw_{n+1}\gamma_n - Aw_n\beta_n$  read:  $A(w_{n+1}\gamma_n - w_n\beta_n)$
- p. 50, Eq. (7.20g):  $-z'_n\alpha_n\beta_n$  read:  $+z'_n\alpha_n\beta_n$
- p. 51, line 1:  $z_{n+1}/\dot{\rho}_{n+1}$  read:  $z_{n+1}/\dot{\rho}_{n+1}^2$
- p. 51, line 8:  $Aw_{n+1}$  read:  $A(w_{n+1}\gamma_n - w_n\beta_n)$
- p. 51, line -1:  $+\omega'_n\zeta(\sigma'_n)^2$  read:  $-\omega'_n\zeta(\sigma'_n)^2$
- p. 52, Eq. (7.24h): *read:*

$$= r_n - [At'_n(2\psi_n\Omega_{n-1} - \beta'_n\omega'_n) + As'_n(2\Omega_n - \alpha'_n\omega'_n) - At'_{n+1}\gamma'_n\omega'_n]\omega'_n,$$
- p. 52, Eq. (7.24i):  $(2\Omega_n + \alpha'_n\omega'_n)$  read:  $(2\Omega_n - \alpha'_n\omega'_n)$
- p. 53, Eq. (7.28g):  $r_n - [Ap'_n(2\omega'_n)$  read:  $r_n - Ap'_n(2\omega'_n)$

*Acknowledgment.* Many of these corrections were found while Noël Nachtigal was coding the algorithms. (Ten algorithms in half a day!)