

## Errata Sheet (29 June 2016)

- p. xx: The entry for  $\{g_{j,l}\}$  should say ‘with  $\{g_{1,l}\} = \{g_l\}$ ’ rather than ‘with  $\{g_{1,l}\} = \{g_j\}$ ’. The entries for  $\{\tilde{g}_{j,l}\}$ ,  $\{h_{j,l}\}$  and  $\{\tilde{h}_{j,l}\}$  need similar corrections also (spotted by Phil Reiss).
- p. 25: In the first line, ‘the convolution of  $\{a_t^*\}$ ’ should be replaced by ‘the time reverse of the convolution of  $\{a_t^*\}$ ’ (spotted by Himadri Ghosh).
- p. 50: In the last line, the plus sign before  $B_k$  should be a minus sign (spotted by Weiwei Chung).
- p. 72: Immediately below Equation (72), ‘As discussed in Section 2.5’ should be ‘As discussed in Section 2.6’ (spotted by William Hamilton).
- p. 108: In the first displayed equation, the lower limit in the summation should be  $l = -\infty$  rather than  $l = \infty$  (spotted by Bill Constantine).
- p. 231: The summations in the second displayed equation should be

$$\sum_{l=0}^{L-1} l g_l^2 \quad \text{and} \quad \sum_{l=0}^{L-1} l h_l^2 \quad \text{rather than} \quad \sum_{l=0}^{L-1} l g_l \quad \text{and} \quad \sum_{l=0}^{L-1} l h_l$$

(spotted by Sean Lastuka).

- p. 384: The caption to Table 384 should say ‘atomic clock fractional frequency deviates’ rather than ‘atomic fractional frequency deviates’.
- p. 448: In the next to last line, ‘model radio communications models’ should be ‘mobile radio communications models’ (spotted by Sang-Hoon Park).
- p. 459: In the first displayed equation,  $\gamma_{j,0}(\cdot)$  should be  $\gamma_{j,0}(t)$ .
- pp. 509–10: The solution to Exercise [50b] should read as follows starting from the second sentence:  
The  $k$ th row of  $\mathcal{F}$  is  $\mathcal{F}_{k\bullet}^T$ , so its  $t$ th component is given by

$$\frac{e^{-i2\pi tk/N}}{\sqrt{N}} = \frac{e^{-i2\pi f_k t}}{\sqrt{N}},$$

and the  $t$ th component of  $F_k \mathcal{F}_{k\bullet}$  is given by

$$\begin{aligned} \frac{1}{\sqrt{N}} F_k e^{-i2\pi f_k t} &= \frac{1}{\sqrt{N}} (A_k - iB_k) (\cos(2\pi f_k t) - i \sin(2\pi f_k t)) \\ &= \frac{1}{\sqrt{N}} [A_k \cos(2\pi f_k t) - B_k \sin(2\pi f_k t) \\ &\quad - i (A_k \sin(2\pi f_k t) + B_k \cos(2\pi f_k t))], \end{aligned}$$

from which it follows that the  $t$ th component of  $2\Re(F_k \mathcal{F}_{k\bullet})$ , i.e.,  $\mathcal{D}_{\mathcal{F},k,t}$ , is given by

$$\frac{2}{\sqrt{N}} [A_k \cos(2\pi f_k t) - B_k \sin(2\pi f_k t)],$$

as required.

(Correction spotted by Weiwei Chung.)

- p. 526: In the last displayed equation, all instances of  $\tilde{h}$  and  $\tilde{g}$  should be  $\tilde{h}^\circ$  and  $\tilde{g}^\circ$  (spotted by Caleb Dougherty).
- p. 532: In the solution to Exercise [262a], the first displayed equation should be

$$J = \begin{vmatrix} 1 & 0 \\ -1 & 1 \end{vmatrix} = 1 \text{ rather than } J = \begin{vmatrix} 1 & 0 \\ 1 & 1 \end{vmatrix} = 1$$

(spotted by Evan Hanusa).