Errata for Integral, Probability, and Fractal Measures by G. A. Edgar

January 31, 2008

Page vii Line 14. Delete every n ∈ N and
Page 10 Line 18. After Thomson Add [258],[259]
Page 10 Line -6. After B(x) ∩ B′(x′) Add = ∅
Page 20 Line 18. After Thomson Add [258],[259]
Page 20 Line 6. Replace Let E_n be an increasing sequence
 by Let E_n ⊋ E be a sequence.
Page 21 Line 20. Replace Vitali cover by fine cover
Page 36 Line -4. Replace ∪ y∈S by ∪ y∈A
Page 38 Line 6. Replace t_1 = 0 by t_1 = a
Page 51 Line -2. Replace C_s(F) by ˜C_s(F)
Page 53 Line 3. Replace sup D_M(σ) by inf D_M(σ)
Page 59 Line 12. Replace H_s A_2(h[F]) ≤ pq ∗ H_s A(F)
 by H_s A_2(h[F]) ≤ pq ∗ H_{A_2}(F)
Page 61 Line 19. Replace K ⊋ S by K ⊋ F
Page 62 Line 11. Replace H_{2}(E) > α by H_{28}(E) > α. Choose a sequence
 δ_j so that 2δ > δ_1 > δ_2 > ... and δ_j → δ.
Page 62 Line 20. After compact sets add and H_{3}(A_j) > α
Page 64 Line 5. Add [Answer: No in general, yes in IR^d: A. Schechter, 1998.]
Page 67. Insert at the top
(1.5.12): The Strong Vitali Property is not used in (a), so the inequality

\[ \mathcal{P}^s(E) \inf_{x \in E} D_M^s(x) \leq M(E) \]
does not need this assumption. Without the Strong Vitali Property we may prove a modified form of the second inequality:

\[ M(E) \leq 3^s P^s(E) \sup_{x \in E} D^s_M(x). \]

To do this, use (1.3.1) in place of the Strong Vitali Property. See Cutler [52]. Mattila & Mauldin (Math. Proc. Camb. Phil. Soc. 121 (1997) 81–100) provide an example in Hilbert space where the inequality of (1.5.11) is false with constant 1.

Page 88 Line -9. After the set \( E \), add Remember (1.4.20) and (1.5.10).

Page 96 Line 2. Replace \( \Phi(1 \, l \cup \, U_k) \) by \( \Phi(1) \).

Page 106. Everywhere, replace \( \varepsilon/5 \) by \( \varepsilon/7 \) and \( \varepsilon/(5 \gamma) \) by \( \varepsilon/(7 \gamma) \).

Page 107 Line 11. Replace converges to \( E_0 \) by converges narrowly to \( E_0 \).

Page 108 Line -4. After \( \varepsilon < 1 \), add Recall (p. 105) \( V_1 \) is the set of functions with Lipschitz constant 1 and bounded by 1 used to define the metric \( \rho_1 \).

Page 109 Line 9. Replace K is by K is.

Page 127 Line 4. Replace the parenthesis by (the variant on page 67 that does not require the Strong Vitali Property).

Page 132. Figure 3.3.21. Label \( T_1 \) is missing.

Page 136 Line 1. Replace \( F_1(0,1) \) by \( F_1(1,1) \) and \( F_2(0,1) \) by \( F_2(1,1) \).

Page 137 Line 1. Replace \( F_3(0,1) \) by \( F_3(1,1) \) and \( F_4(0,1) \) by \( F_4(1,1) \).


Page 185 Line 7. Replace for all \( t \in \mathbb{R} \) by for \( D_X \)-almost all \( t \in \mathbb{R} \).

Page 186 Line 5. Replace the third \( \sigma' \) by \( \sigma \).

Page 191 Line -7. Replace \( \leq \) by \( \geq \).
Page 193. Replace footnote 10 by

**TIMING TOAST**

Grook on how to char for yourself

There’s an art of knowing when.
Never try to guess.
Toast until it smokes and then
twenty seconds less.

Piet Hein, *Grooks 2*, p. 23

Page 195 Line 16. Replace most likely by more likely
Page 197 Line 16. After dyadic subintervals add \([j/2^k, (j + 1)/2^k]\]
Page 202. Add (4.3.18): the converse is not true
Page 211 Line -15. Replace all \(U\) by all \(e \in E\) and \(f_eU\) by \(f_e[U]\)
Page 211 Line -14. Replace \(e \neq s' \in E\) by \(e \neq e' \in E\)
Page 213 Line 19. Replace Show that Lemma 5.2.4 remains by Does Lemma 5.2.4 remain
Page 216 Line 1. After triangle \(T\) add (p. 214)
Page 228 Line -2. Replace \(n(2^i)\) by \(n(2^i, k + 1)\)
Page 229 Line -1. Replace \(n(2^i)\) by \(n(2^i, k + 1)\)
Page 231. Figure 5.5.1. The second and third graphs are interchanged.
Page 235 Line -3. Replace denominator \(k + 1\) by denominator \(2k + 1\)
Page 239 Line -2. Replace \(C_2(t - s)\) by \(C_1(t - s)\)
Page 240 Line 11. Replace by q factor by by a factor
Page 247 Line -9. Replace \(k^2/2^{k-1}\) by \(k^2/2^{k-1}\)
Page 248 Line 13. After each jump add and their limit points
Page 251 Line -4. Replace \(X'(t) = X(t + p) - X(p)\) by \(X'(t) = X(t + p) - X(p)\)
Page 254 Line 7. Replace Brownian by Brownian
Page 259 Line 14. Replace \(p_e = r^e(\gamma)\) by \(p_e = r^e(\gamma)\)
Page 264 Line -9. Replace \((2((1/4)^s + (1/8)^s))^k\) by \((1/4)^s + (1/8)^s\)
Page 264 Line -7. Replace 0.8232 by 0.4057
Page 264 Line -6. Replace 0.5652 by 0.7549 and 1/2 by 1
Page 264 Line -5. Replace display by

\[
\lambda = \frac{\sqrt{100 + 12\sqrt{69}}}{6} + \frac{\sqrt{100 - 12\sqrt{69}}}{6} - \frac{1}{3}
\]

Page 265 Line 6. Replace paragraph by (5.4.12) The number of descendents eventually reaches zero (so that \(K = \emptyset\)) when \(\Phi(0) = 1\) except in a “deterministic” situation where there is exactly one descendent with probability 1. The number of descendents after \(n\) steps is a nonnegative martingale, so it converges; then argue that the limit must be 0 almost surely.
Page 283. Before Haase add grook, 193
and before Henstock add Hein, Piet, 193

Page 284. Replace multifractal decomposition, 25
by multifractal decomposition, 257