CORRECTIONS - SECOND EDITION - May 11, 2019

Items marked with (*) have *not* been incorporated in the corrected printing of the second edition.

1. Page 8, add line 3: "All topological spaces in the sequel are assumed to be Hausdorff".

2. Page 16, Theorem 2.1.10, replace $\mathbb{R}^{|\Sigma|}$ by $M_1(\Sigma)$.

3. Page 40, line -6: Normal(0,I) nstead of Normal(0,1).

4. Page 58, line 2: replace $\lambda = (1+v)^{-1}\log((x+v)/(1+v))$ by $\lambda = (1+v)^{-1}\log((x+v)/v(1-x))$.

5. (*) Page 54, Exercise 2.3.26: replace $Z_n = \sum_{i=1}^n \eta_i^{(n)} Y_i^2$ by $Z_n = n^{-1}\sum_{i=1}^n \eta_i^{(n)} Y_i^2$ throughout the exercise except that in the hint, replace $n^{-1}Z_n$ by Z_n.

6. (*) Page 60, line 18: replace $B(\cdot) \geq 1$ by $B(\cdot) \leq 1$.

7. Page 74, line -1, replace Π_λ by $\mathbf{\Pi}_\lambda$.

8. Page 76, line 9: should be "unique non negative left eigenvectors".

9. Page 82, line -13, replace $H(q) \stackrel{\triangle}{=} \ldots$ by $H(q) \stackrel{\triangle}{=} -\ldots$.

10. (*) Page 93, proof of Corollary 3.4.6: erase the sentence "It suffices to consider only Neyman-Pearson tests". Erase the words "Neyman-Pearson" and the parantheses "(when $\gamma_n \leq 0$)" and "(when $\gamma_n \geq 0$)" in lines -7 and -6.

11. (*) Page 94, proof of Lemma 3.4.7: erase the sentence "It suffices to consider only Neyman-Pearson tests" at the beginning of the proof. In page 95, after (3.4.12), add (Indeed, by continuity, one can always choose $\gamma_n \to \bar{x}_0$ so as to achieve $\alpha_n > \epsilon$, and then apply optimality with respect to such a test.)

12. Page 99, line -2: not *necessarily.*

13. Page 101, line -11, replace $\Sigma = \mathbb{R}$ by $\Sigma = [0,1]$.

14. (*) Page 104, line -3, replace "and let ..." by "and for a given collection $C_n \subseteq \Sigma^n$ of cardinality k_n, let ...".

15. (*) Page 105, line 1, replace "any measure" by "any corresponding measure". Line 3, add after "is generated" the text "by the preceeding mapping, with C_n as collection of code words".

16. Page 106, Theorem 3.6.8, part (a): add "for all sufficiently large n"

17. (*) Page 108, Exercise 3.6.10(a), add the condition that $R_1(D) < \infty$.

18. (*) Page 125, line -2, replace $y^{-1}J(xy, y)$ by $|y|^{-1}J(xy, y)$.

19. (*) Page 151, line -9, replace $A \in \mathcal{E}$ by $A \subset \mathcal{E}$.

20. Page 153, Figure 4.5.2: the lines are not of $< \lambda_i, x > -g(\lambda_i) = 0$ but rather of $< \lambda_i, x > -g(\lambda_i) = c_i$, where $c_i = f(x_i)$ and x_i is the point of tangency of the line with slope λ_i to the graph of $f(\cdot)$.

21. Page 161, line 6, replace $x \in \mathcal{X}$ by $x \in \mathrm{dom}\partial\Lambda^*$.

22. Page 170, line -7, replace *for for* by *for*.

23. Page 185, line 16 and Page 187, line 17: add "all absolutely continuous functions *with value 0 at 0* ...."

24. Page 188, Equation (5.2.15): the right hand side should be $2e^{-(\delta-E)^2/2V}$, where
$$V = \sup_{0 \le s,t \le 1} E|X_{t,s}|^2 .$$

25. Page 214, display in remark: add) before the transpose sign in the expression for $I_x(f)$.

26. Page 241, line 6: omit $-$.

27. (*) Page 298, the second $=$ in the long display should be $\geq$.

28. (*) Page 312, Lemma 7.1.1: the statement is false, as pointed out by Noé Cuneo. The correct statement is: For any $0 \leq \gamma \leq 1$ so that there exists a $\eta(\gamma, \mu_0, \mu_1)$ such that $\alpha(\tilde{\mathcal{S}}) \leq \gamma$, ...

29. Page 313, line 9: replace $\mathcal{X}$ by $\mathcal{Y}$.

30. Page 330, line -5: remove one) before the period.

31. (*) Page 336, line -4, replace "non-decreasing" by "non-increasing".

32. (*) Page 337, line 1, replace "monotone convergence theorem (Theorem C.11)" by "Fatou's lemma".

33. Page 349, line 16: replace "were" by "where".

34. Page 355, Theorem D.4: Replace Σ by Σ_i and replace "is" by "are".

35. Page 361, line 4: add $f(t, x) : [0, \infty) \times \mathbb{R}^d \to \mathbb{R}^d$. Equation (E.8), replace x by x_0.

36. Page 367, in [BryD95]: replace 23–24 by 23–34.

37. Page 376, item [KK86]: Replace "Kellenberg" by "Kallenberg".