Errata for
Markov Processes, Gaussian Processes, and Local Times,
by Michael B. Marcus and Jay Rosen, 2006,
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page 1, line 11: Change 'provided' into 'provide'

page 9, line 3: Reads 'We say that a function is locally uniformly continuous on a measurable set in (S, τ)...' Should read 'We say that a function is locally uniformly continuous on a locally compact metric space (S, τ)...'

page 101, line 4: Reads 'we see that $E^x \sup_{t\geq 0} \sup_{x\in F} A_t^x < \infty$' Should read 'we see that $E^x \sup_{t\geq 0} \sup_{x\in F} (A_t^x)^p < \infty$'

page 108, (3.195): Should be (changed some E_λ^x to E_λ^0)

$$\begin{aligned} &E_\lambda^0 \left(\int_{\tau(\lambda)}^\infty e^{-\beta t}\, dL_t^y \right) \\ &\qquad = E_\lambda^0 \left(1_{\{\tau(\lambda)<\infty\}} \int_{\tau(\lambda)}^\infty e^{-\beta t}\, dL_t^y \right) \\ &\qquad = E_\lambda^0 \left(e^{-\beta\tau(\lambda)} 1_{\{\tau(\lambda)<\infty\}} \left(\int_0^\infty e^{-\beta t}\, dL_t^y \right) \circ \theta_{\tau(\lambda)} \right) \\ &\qquad = E_\lambda^0 \left(e^{-\beta\tau(\lambda)} 1_{\{\tau(\lambda)<\infty\}} E^{X_{\tau(\lambda)}} \left(\int_0^\infty e^{-\beta t}\, dL_t^y \right) \right) \\ &\qquad = E_\lambda^0 \left(e^{-\beta\tau(\lambda)} \right) E^0 \left(\int_0^\infty e^{-\beta t}\, dL_t^y \right) \end{aligned}$$

and (3.196): Should be

$$E_\lambda^x \left(\int_{T_0+\tau(\lambda)\circ\theta_{T_0}}^\infty e^{-\beta t}\, dL_t^y \right) = E^x \left(e^{-\beta T_0} \right) E_\lambda^0 \left(e^{-\beta\tau(\lambda)} \right) u^\beta(0, y). \tag{0.1}$$

page 112, (3.218), (3.220): E^x should be $E^{x/h}$, and page 113, (3.222) E^y should be $E^{y/h}$.

page 141, (4.96): Change C_β into $\frac{C_\beta}{2}$

page 142, (4.102): The 2 in the numerator should be changed to 1

page 206, line -8 and page 618, line 8: Change Loéve to Loève

page 219, third line of Theorem 5.4.3: Put a period after $\sup_{z\in T} X(z)$ delete 'and let' and add 'Assume that $a < \infty$ and let'

page 222, line 20: Delete the sentence, We always have $a_n < 2\sigma_n \leq 2\sigma$. Then replace, Since we assume that σ is finite, we see that α is also finite. by, Since we assume that the median of $\sup_{z\in T} X(z)$ is finite, we see that α is also finite.

page 225, line -4: Immediately after the bold face Proof, replace, By hypothesis, by, The statement that X is a $(B, \|\cdot\|)$-valued random variable means that $\|X\| < \infty$ almost surely. Furthermore, by hypothesis {and continue with the text}

page 237, (5.257) delete the 2 immediately following the = sign

page 242, line 2: Change Brun to Brunn

page 262, line 4: change (6.83) to (6.84)

page 290, (7.42) change the + sign to a − sign (i.e. minus sign)

page 364, (8.12): Reads 'h_x'. Should read '$h(x)$'

page 392, line 6: Delete the word 'second'

page 473, line (10.100)+1: Reads '$(x_{i-1}, \Lambda(\omega)) \subset J_{m,j}$'. Should read '$(x_{i-1}, x_i) \subset J_{m,j}$'

page 476, line 9: This should be Theorem 7.2.14

pages 480–481, (10.130)–(10.135), (10.137): Change $(2C_{\mathcal{B}})^{p/2}$ into $(2C_{\mathcal{B}})^{1/2}$

page 538, (12.38)–(12.40): Change L^r_∞ to $\bar{L}^r_\infty$

page 553, line -8: Reads 'processes..' Should read 'processes.'

page 561, Theorem 13.2.1: Reads 'Let $G = (G_{x_1}, \ldots, G_{x_p})$' Should read 'Let $G = (G(x_1), \ldots, G(x_p))$'

page 562, (13.53): Reads 'trace$\{(S^{1/2}QS^{12})^n\}$' Should read 'trace$\{(S^{1/2}QS^{1/2})^n\}$'

In the second, third, and fourth paragraphs on page 564 we use the letter G 19 times, with different subscripts. Change all the G to H,

and keep the subscripts the same. For example $G_1, \ldots, G_m$ should be changed to $H_1, \ldots, H_m$ etc.

page 564, line 12: Change 'irreducible' to 'maximal irreducible'

page 565, Lemma 13.2.2: Reads 'Let $\psi : (R_+)^n \to (R_+)^n$ be a continuous function.' Should read 'Let $\psi : (R_+)^n \to R_+$ be a continuous function with $\psi(\mathbf{0}) = 1$.'

page 566, from line 9 on: Delete: Let $\{\lambda_i\}$ denote the diagonal elements of Λ and let $s_i = \exp(-\lambda_i/a)$. (Recall that $\mathbf{s} = (s_1, \ldots, s_p)$ and S is a diagonal matrix with diagonal entries $s_1, \ldots, s_p$.) Then

$$\lim_{a\to\infty} P_a(\mathbf{s}) = |I + \Gamma\Lambda|^{-1/2}. \qquad (13.66)$$

page 566, (13.66)-3: Before the sentence 'By the hypothesis there exists...' insert a new sentence 'Recall that $W = \Gamma^{-1}$.'

page 566: Replace (13.68) by:

$$\begin{aligned} |I + \Gamma a(I - S)| &= |\Gamma(W + a(I - S))| \\ &= |\Gamma|\,|W + a(I - S)| \\ &= |\Gamma|\,|DWD + a(I - S)| \\ &= |\Gamma||\lambda I - B + aI - aS| \\ &= |\Gamma|(\lambda + a)\Big|I - \frac{1}{\lambda + a}(B + aS)\Big|. \end{aligned}$$

page 571, line -7: Reads '$\bar{A}_{n,n}$'. Should read '$\bar{A}_{n+1,n+1}$'

page 580, line 2: Change 'continn' to 'continuity'

page 599, (14.85): Should be

$$((u_1 + ru_2), A(u_1 + ru_2)) = \rho_1 + r^2\rho_2 < 0.$$

page 609, line -2: Change Konig to König

page 610, line 1: Change Asterisque to Astérisque