Errata to "Long-Range Dependence and Self-Similarity"

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- P. 440: The equation (8.1.17) should read

$$\nu_n = \Big(n - \frac{1}{2}\Big)\pi - \frac{\kappa\pi}{2} + \arcsin\frac{\ell(\kappa)}{\sqrt{1+\ell(\kappa)^2}} + O(n^{-1}),$$

where

$$\ell(\kappa) = \frac{\sin\frac{\pi}{2}\frac{\kappa}{\kappa+1}}{\sin\frac{\pi}{2}\frac{1}{\kappa+1}},$$

and the equation (8.1.18) should read

$$\begin{aligned}\phi_n(t) &= \sqrt{2}\sin\Big(\nu_n t + \frac{\kappa\pi}{4} - \arcsin\frac{\ell(\kappa)}{\sqrt{1+\ell(\kappa)^2}}\Big) \\ &\quad -\frac{\sqrt{2\kappa+2}}{\pi}\int_0^\infty \rho_0(u)\Big((-1)^n e^{-(1-t)\nu_n u} + \frac{u-\ell(\kappa)}{\sqrt{1+\ell(\kappa)^2}}e^{-t\nu_n u}\Big)du + \nu_n^{-1} r_n(t),\end{aligned}$$

where $\rho_0(u)$ is defined as in the book but with the definition of $\theta_0(u)$ modified as

$$\theta_0(u) = \arctan\frac{\sin(\kappa\pi)}{u^{2\kappa+2} + \cos(\kappa\pi)}.$$

See Chigansky and Kleptsyna [1], Theorem 2.1.

Chapter 9
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Appendix A
Appendix B
Appendix C

References

[1] P. Chigansky and M. Kleptsyna, "Exact asymptotics in eigenproblems for fractional Brownian covariance operators", *Stochastic Processes and Their Applications*, To appear, 2017.