

Errata of the book “Affine Diffusions and Related Processes: Simulation, Theory and Applications”.

- p. 16, l.-3: replace “with $\nu > 0$ degrees of freedom” by “with $2\nu > 0$ degrees of freedom” to comply with the standard definition. Accordingly, one should replace
 - p. 17, l. 9: “ $\frac{2a}{\sigma^2}$ ” by “ $\frac{4a}{\sigma^2}$ ”,
 - p. 18, l. 3: “ $\nu > 0$ degrees of freedom” by “ $2\nu > 0$ degrees of freedom”,
 - p. 36, l. 9: “ $\frac{2k\theta}{\sigma^2}$ ” by “ $\frac{4k\theta}{\sigma^2}$ ”,
 - p. 36, l. 10: “ $\nu > 0$ degrees of freedom” by “ $2\nu > 0$ degrees of freedom”.
- p. 63, second equation: a nabla is missing: $f(X_k(t, x)) = f(x) + \int_0^t v_k(X_k(s, x)) \cdot \nabla f(X_k(s, x)) ds = f(x) + \int_0^t V_k f(X_k(s, x)) ds$.
- p. 98, 2nd equation: an half is missing: the infinitesimal generator is given by

$$Lf(x, v) = (r - \frac{v}{2}) \partial_x f(x, v) + (a - kv) \partial_v f(x, v) + \frac{\sigma^2}{2} v \partial_v^2 f(x, v) + \frac{v}{2} \partial_x^2 f(x, v) + \rho \sigma v \partial_x \partial_v f(x, v).$$
- p. 100, Corollary 4.2.2, a parenthesis is missing in the third condition. One should read

$$3. \quad v(p) > \frac{k^2}{2\sigma^2}, \text{ and } t < \frac{2}{\bar{\gamma}_{v(p)}} \left(\arctan \left(\frac{\bar{\gamma}_{v(p)}}{\rho \sigma p - k} \right) + \pi \mathbb{1}_{\{\rho \sigma p - k < 0\}} \right).$$
- p. 126, Eq (5.8): read $4\text{Tr}(B_t B_t^\top A_t^\top A_t) dt$, and $d\text{Tr}(Y_t) = \text{Tr}(C_t) dt + 2\text{Tr}(A_t B_t dW_t)$ two lines before.
- p. 141, Prop 5.3.4: replace a^\top by aa^\top in equation (5.25).
- p. 185 : expectation of (1.6) by (6.1).
- p. 242, l. 11: “ $f(v)$ ” is missing, one should read: $= \int_0^\infty f(v) \frac{(\alpha-1)^\alpha}{\Gamma(\alpha)} \exp(-(\alpha-1)v) v^{\alpha-1} dv$.