

Errata:

《An Introduction to Stochastic Dynamics》 Cambridge University Press, 2015

P30, line 2: $\mathbb{E}X \dots \wedge^p$

P30, bottom: $p, q > 1, 1/p + 1/q = 1$

P31, line 5: $\sigma > 0$,

P31, line 18: $M^k(0)$

P36, lines 19, 20, 23, 24, 27: $B(0, T) \times F, (0, T) \times \Omega, \dots$

P36, lines 20, F changes to $B(0, T)$; $B(0, T)$ changes to F

P51, line -5: Move $1/\Delta t$ to the left side

P55, line 11: delete extra \int_0^∞

P65, line 15: Missing subscript i in τ_i

P79, first sentence in Example 4.13): $X^2 \rightarrow X_t^2$

P86, at the end of (4.82): Delete the extra)

P88, line -3: \mathbb{R}^n

P89, line 1 and line 3 (twice): \mathbb{R}^n ; line 3: second term in the right hand side--- should be double bar $|| \dots ||$

P113, line 4: ridges \rightarrow ridge

P116, line 4: $X_t \rightarrow X(t)$

P123, lines under (5.81) and (5.82) : should be \mathbb{R}^n

P126, Example 5.22: change W_t to B_t

P129, Problem 5.1: change W_t to B_t , and change W_s to B_s

P130, Problem 5.3: linear \rightarrow nonlinear

P131, Problem 5.9: $D = (1, 2)$

P131, Problem 5.8: change W_t to B_t

P135, eqn (6.3): $\phi_0(x_0)=x_0$

P137, line 2: should be (6.6)

P153, line 2: should be (t, ω)

P156, line -3: $B_\tau(\omega)$

P158, line 16: $m \rightarrow k$

P159, eqn (6.62): should be $B_s(\omega)$

P160, eqn(6.67) top: should be x^2 ; eqn (6.68) inside parenthesis but before the integral sign: missing "2".

P172, line 19: $F \rightarrow F(t)$

P175, line 7: ξ_t should be ξ

P179, eqns (6.125): should be (ω, x^s)

Left hand side of Eqn (6.126): (ω, x^s)

Right hand side of eqn (6.127): (ω, x^u)

Left hand side of eqn (6.128): (ω, x^u)

P192, at the end of line -8, add: Recall that L_t has a cadlag modification on Ω_0 and $P(\Omega_0)=1$ (see Applebaum p 88)

P198 (i) and (iii): σ should be σ^α (see David Applebaum book p 35)

In mathematical expressions the sign function is often represented as "sgn".

P199 line -4: $2\sigma^2$ should be σ^2

P200 line 4: $2\sigma^2$ should be σ^2

P202, eqn (7.21): $(2k)! \rightarrow 2^k k!$

P203, line 10: missing c_α in three places

P209, lines -11 and -12: missing c_α in three places

P211, eqn(7.39): no constant C in the characteristic function.

P212, Figs 7.10-12: $C \rightarrow c$

P215, eqns (7.54), (7.55) and (7.56): $g \rightarrow g(t, \omega)$

P220, eqn (7.67): the last term of integral, should be $\sum_{i=1}^n y_i \rho_i g(x)$

P221, line 9: $\|y\| < 1$; Eqn (7.71): $\|\xi\|^2$

P221, line -5: [145, Lemma 17.21, p328]

P236, line -11: $x > -0.5$

P236, line -12: $P(x) \rightarrow p(x)$

P237, Fig 7.29: $P(X) \rightarrow p(x)$

P238, line -6: $\phi \rightarrow v$

P239, eqn (7.107): $\phi \rightarrow v$

P239, right hand side of eqn (7.109): $p(x) \rightarrow p(x, t)$

P239, line -4: In the first term of the right hand side, delete extra “)”