

Corrections of Feynman-Kac-type theorems and Gibbs measures on path spaces vol1.

1. p.39,  $\ell.4$ : The left hand side of (2.141) defines a probability measure....  $\implies$  If  $X \geq 0$ , the left hand side of (2.141) defines a probability measure....
2. p.134,  $\ell.2$ :  $= \frac{\sigma^2}{2a}(1 - e^{-2a(s \wedge t)}) \implies = \frac{\sigma^2}{2a}e^{-a(s+t)}(e^{+2a(s \wedge t)} - 1)$
3. p.149, Theorem 3.10: The triplet  $(b, A, \nu)$  is uniquely given. (2) Conversely, given ....  $\implies$  (2) The triplet  $(b, A, \nu)$  is uniquely given. (3) Conversely, given ....
4. p.320,  $\ell.14$ :  $\varphi(x) \geq \varepsilon(b) \dots e^{-\gamma 2^{4m}|x|^{m-1}} \dots \implies \varphi(x) \geq \varepsilon(b) \dots e^{-\gamma 2^{4m}|x|^{m+1}} \dots$
5. p.323,  $\ell.9u$ :  $(f, Q_t g) = \dots e^{-\int_0^t V(y - \tilde{B}_t - \tilde{B}_s) ds} g(y) \dots \implies (f, Q_t g) = \dots e^{-\int_0^t V(y - \tilde{B}_t + \tilde{B}_s) ds} g(y) \dots$
6. p.335,  $\ell.10u$ :  $\sup_{|y|>R} V_-(y) < \varepsilon$  and  $\varepsilon$  small enough such that  $q = -(E+\varepsilon) > 0 \implies \sup_{|y|>R} V_+(y) < \varepsilon$  and  $\varepsilon$  small enough such that  $q = -(E - \varepsilon) > 0$ .
7. p.364,  $\ell.3$ :  $\log(\frac{1}{2}(b_1(B_s) - i\theta_{N_s} b_s(B_s))) \implies \log(\frac{1}{2}(b_1(B_s) - i\theta_{N_s-} b_s(B_s)))$
8. p.315, (4.3.80):  $\mathbb{E}^x[e^{-4 \int_0^t U(B_s) ds}] \implies \mathbb{E}^x[e^{+4 \int_0^t U(B_s) ds}]$
9. p.317,  $\ell.6$ :  $\frac{\alpha}{16\varepsilon} + \varepsilon(W_\infty - E - \frac{1}{2}\varepsilon(\Sigma - E)) = \dots \implies \frac{\alpha}{16\varepsilon} + \varepsilon(W_\infty - E) - \frac{1}{2}\varepsilon(\Sigma - E) = \dots$
10. p.268, (4.2.43):  $\sup_{x \in \mathbb{R}^d} \sup_{0 \leq t \leq T} \implies \sup_{0 \leq t \leq T} \sup_{x \in \mathbb{R}^d}$
11. p.318,  $\ell.10$ :  $F(\xi) = 1 - (e^{-21\beta/8} + e^{-5\beta/8} + e^{-165\beta/8}) = 0$   
 $\implies F(\xi) = 1 - (e^{-21\xi/8} + e^{-5\xi/8} + e^{-165\xi/8}) = 0$
12. p.341, (4.6.9):  $\prod_{j=1}^n e^{-(t_j t_{j-1}) H_R^0} \implies \prod_{j=1}^n e^{-(t_j - t_{j-1}) H_R^0}$
13. p.322,  $\ell.11u$ :  $H(a)f Z_t dt + Z_t(\nabla f + (-ia)f) \cdot dB_t \implies H(a)f Z_t dt + Z_t(\nabla f + (-ia)f) \cdot dB_t$
14. p.322,  $\ell.9u$ :  $= \int_0^t (Q_s H(a)f)(x) ds \implies - \int_0^t (Q_s H(a)f)(x) ds$
15. p.341, (4.6.9):  $\prod_{j=1}^n e^{-(t_j t_{j-1}) H_R^0} \implies \prod_{j=1}^n e^{-(t_j - t_{j-1}) H_R^0}$
16. p.468, (5.1.67):  $= x^2 e^{-\omega(t+s)} + \frac{\sigma^2}{2\omega}(1 - e^{-2a(s \wedge t)}) \implies x^2 e^{-\omega(t+s)} + \frac{\sigma^2}{2a}e^{-\omega(t+s)}(e^{+2\omega(s \wedge t)} - 1)$