ERRATA

p. 3, line 3up: Change \( B(0,2^{-m+1}) \) to \( \overline{B(0,2^{-m+1})} \)

p. 11, line 12dn: Change \( C_b(\mathbb{R}^N; \mathbb{C}) \) to \( C_0^b(\mathbb{R}^N; \mathbb{C}) \)

p. 19, line 8dn: Delete \( \int[t] \) from this line

p. 21, line 4up: Replace by

\textit{Proof.} Observe that \( u \) can be replaced by \( |u| \) and therefore that one can assume that \( u \geq 0 \). Set...

p. 28, line 7up: Replace \( |y - x| \leq \|y - x\|^2 \leq \)

p. 33, line 12up: Replace \( 2^{\frac{q}{2}} - 1 \) by \( 2^{-\frac{q}{2}} - 1 \)

p. 35, line 7up: Replace \( \|k - m\|_\infty = 1 \) by \( \|k - m\|_1 = 1 \)

p. 35, lines 3up and 1up: Replace \( (2^{N+1}N)^{\frac{1}{2}} \) by \( 2^{\frac{N}{2}} \)

p. 35, footnote: Replace \( \|x\|_\infty = \max_{1 \leq j \leq N} |x_j| \) by \( \|x\|_1 = \sum_{j=1}^N |x_j| \)

p. 36, lines 5dn and 3up: Replace \( (2^{N+1}N)^{\frac{1}{2}} \) by \( 2^{\frac{N}{2}} \)

p. 45, line 9dn: Replace \( 2^{\frac{1}{2}} \) by \( 2^{-\frac{1}{2}} \)

p. 53, line 14dn: Replace \( \int_{\mathbb{R}^N} \) by \( \int_{\Gamma} \)

p. 65, lines 8dn–17dn: Change to such that

\[ \mathcal{F} := \{(t, y) : t \in [0, s] \text{ and } |y - p(t)| < 2r\} \subseteq \mathcal{G}, \]

\[ [s - r, s] \times \overline{B(x,2r)} \subseteq \mathcal{G}, \text{ and } |p(t) - x| < r \text{ for } t \in [s - r, s], \text{ and } u(t, y) \geq u(0, 0) + \delta \text{ for } (t, y) \in [s - r, s] \times \overline{B(x,2r)}. \]

Next, set

\[ \zeta^\beta(w) = \inf\{t \geq 0 : (t, w(t)) \notin \mathcal{F}\} \]

and \( \zeta(w) = \inf\{t \geq s - r : w(t) \in B(x,2r)\} \),

and observe that \( \|w - p\|_{\mathcal{G}, s} < r \implies \zeta(w) < \zeta^\beta(w) \). Hence, since

\[ u(0, 0) = \mathbb{E}^W[u\left(\zeta^\beta, w(\zeta^\beta + \zeta^\beta)\right)] \geq u(0, 0)W(\zeta^\beta \leq \zeta) + (u(0, 0) + \delta)W(\zeta < \zeta^\beta) \]

\[ = u(0, 0) + \delta W(\zeta < \zeta^\beta) \]

and \( W(\zeta < \zeta^\beta) \geq W(\|w - p\|_{\mathcal{G}, s} < r) > 0 \), we would have the contradiction that \( u(0, 0) > u(0, 0) \).

p. 76, lines 7up & 4up; p. 77, 1dn: Change \( I_\sigma \) to \( I_{\sigma_\alpha} \)

p. 77, lines 10dn & 11dn: Change \( m < 2^n \) to \( m < 2^n t \)

p. 80, line 7dn: Change “a is” to “is a”

p. 80, line 13up: Change \( \mu_t \) to \( \mu(t, \cdot) \)

p. 80, line 11up: Change \( 1_{[a,t]} \) to \( 1_{[p(a), p(t)]} \)

p. 87, line 9up: Change \( 2^{\frac{1}{2}} \) to \( 2^{-\frac{1}{2}} \)

p. 111, line 13up: Change \( M(\zeta_{m,n}) \geq 2^{-n} \) to \( M(\zeta_{m,n+1}) \geq 2^{-n-1} \)
p. 112, line 8dn: Change $2^{1-2n}$ to $4^{1-n}$

p. 122, line 2dn: Change $\sigma(\tau)^T dA(\tau) \sigma(\tau)$ to $\sigma(\tau) dA(\tau) \sigma(\tau)^T$

p. 124, line 6dn: Change $\nabla_{(2)} \varphi$ to $\nabla^2_{(2)} \varphi$

p. 128, line 15dn: Change $\sigma^{-1} \xi$ to $\sigma^{-1}(\tau) \xi$

p. 133, line 4dn: Change $d(x(\tau))$ to $dX(\tau)$

p. 133, line 1up: After “derivatives,” insert “assume that the first derivatives of $\sum_{k=1}^{M} L_{V_k} V_k$ are bounded,”

p. 155, line 9up: Change $\lfloor \tau \rfloor$ to $\lfloor \tau \rfloor_n$

p. 166, line 7dn: Insert “equation” after “stochastic integral” at the end of this line

p. 166, line 3up: Change $(x^1, \ldots, x^m)$ to $(x^1, \ldots, x^N)$

p. 167, line 3up: Change $\sum_{j=m+1}^{M}$ to $\sum_{j=m+1}^{N}$

p. 168, line 6up: Change $L = \sum_{j=1}^{N}$ to $L = \frac{1}{2} \sum_{j=1}^{N}$

pp. 168 & 169, lines 4up & 6dn: Change $\Delta_M$ to $\frac{1}{2} \Delta_M$