

Bernstein Functions: Theory and Applications

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by

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List of misprints and smaller additions to the present text. Date: September 19, 2011.

PAGE, LINE	READS	SHOULD READ
p. 20, l. 14 below	$(1 - e^{-\lambda t})/\lambda = \int_0^1 e^{-\lambda s} ds$	$(1 - e^{-\lambda t})/\lambda = \int_0^t e^{-\lambda s} ds$
p. 32, l. 16 below	Lemma 4.6	Corollary 4.6
p. 40, l. 9 below	$\alpha \in [0, 1]$	$\alpha \in (0, 1]$
p. 40, l. 2 below	$\alpha \in [0, 1]$	$\alpha \in (0, 1]$
p. 41, l. 15 above	$\alpha \in [0, 1]$	$\alpha \in (0, 1]$
p. 42, l. 8 above	$\alpha \in \mathbb{R}$	$\alpha \in \mathbb{R} \setminus \{0\}$
p. 42, l. 13 below	$f(\lambda) := \log g(\lambda)$	$f(\lambda) := -\log g(\lambda)$
p. 59, l. 11 below	and ρ' is a measure on $(0, \infty)$ such that $\rho'[1, \infty) < \infty$.	and ρ' is a measure on $[0, \infty)$ such that $\rho'[0, \infty) < \infty$.
p. 60, l. 10 above	$\mathcal{CBF} \cap \{f : f(0+) > 0\} = e^{\mathbb{R} + \mathcal{CBF}} = (0, \infty) \times e^{\mathcal{CBF}}$.	$\mathcal{CBF} \cap \{f : f(0+) > 0\} \subset e^{\mathbb{R} + \mathcal{CBF}} = (0, \infty) \times e^{\mathcal{CBF}}$.
p. 129, l. 6 above	matrix monotone function f	matrix monotone functions f

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PAGE, LINE	READS	SHOULD READ
p. 155, l. 7 above	$= f(s) \int_0^{1/s} u(t) dt + \int_{1/s}^{\infty} (u(t-1/s) - u(t)) dt$	$= f(s) \left[\int_0^{1/s} u(t) dt + \int_{1/s}^{\infty} (u(t-1/s) - u(t)) dt \right]$
p. 157, l. 4 above	$f, g \in \mathcal{BF}$	$f, g \in \mathcal{SBF}$
p. 161, l. 9 below	$\mathcal{E}_{\beta}(u, v) := \mathcal{E}(u, v) + \langle u, v \rangle_{L^2}$	$\mathcal{E}_{\beta}(u, v) := \mathcal{E}(u, v) + \beta \langle u, v \rangle_{L^2}$
p. 168, l. 7 above	$h \in L^{\infty}(D, \mathcal{C}, m)$	$h \in L^1(D, \mathcal{C}, m)$
p. 168, l. 9–13 below	<p>On the other hand, for every $x \in D$, we have</p> $\left(P_{t/2}^{f,D} g(x) - P_{t/2}^{f,D} g_{n_j, K}(x) \right)^2 = \left(\int_D p^{f,D}(t/2, x, y) (g(y) - g_{n_j, K}(y)) m(dy) \right)^2 \leq 4K^2.$ <p>Thus by the weak convergence of the sequence $(g_{n_j, K})_{j \in \mathbb{N}}$ and the dominated convergence theorem we get that $P_{t/2}^{f,D} g_{n_j, K}(x) \xrightarrow{j \rightarrow \infty} P_{t/2}^{f,D} g(x)$ for every $x \in D$.</p>	<p>On the other hand, for every $x \in D$, we have</p> $P_{t/2}^{f,D} g(x) - P_{t/2}^{f,D} g_{n_j, K}(x) = \int_D p^{f,D}(t/2, x, y) (g(y) - g_{n_j, K}(y)) m(dy).$ <p>Thus by the weak convergence of the sequence $(g_{n_j, K})_{j \in \mathbb{N}}$ and the fact that $p^{f,D}(t/2, x, \cdot)$ is integrable, we get that $P_{t/2}^{f,D} g_{n_j, K}(x) \xrightarrow{j \rightarrow \infty} P_{t/2}^{f,D} g(x)$ for every $x \in D$.</p>
pp. 201–2, header of table	$A = \frac{d}{dm dx}$	$A = \frac{d}{dm ds}$
p. 201, before table	<i>insert the following text before the table</i> \longrightarrow	<p>Let $Y = (Y_t)_{t \geq 0}$ be a reflected diffusion on $[0, \infty)$ with the speed measure m and the scale function s normalized such that $s(0) = 0$. The infinitesimal generator of Y is $\frac{d}{dm} \frac{d}{ds}$. The process $s(Y) = (s(Y_t))_{t \geq 0}$ is also a reflected diffusion on $[0, \infty)$ having the same local time at 0 as Y. Therefore, the Laplace exponents of the inverse local times coincide. Let $\tilde{m} = m \circ s^{-1}$. The generalized diffusion X corresponding to the string \tilde{m} and the process $s(Y)$ have the same infinitesimal generator $A = \frac{d}{d\tilde{m}} \frac{d}{ds}$. This shows that functions in the left column of the table below are densities of Lévy measures of the inverse local time at zero of generalized diffusions.</p>
p. 252, entry 78	Theorem 1.3 of [211], 5.15(9) of [91]	Theorem 1.3 of [211], 5.15(8), (9) of [91]

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PAGE, LINE	READS	SHOULD READ
p. 302, item [193]	On sojourn times, ...	On sojourn times, ...

We would like to thank the following readers for their comments and their contributions to this list:
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