

Bernstein Functions: Theory and Applications

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by

René Schilling, Renming Song, Zoran Vondraček

List of misprints and smaller additions to the present text. Date: August 15, 2010.

PAGE, LINE	READS	SHOULD READ
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
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	$A = \frac{d}{dm} \frac{d}{dx}$	$A = \frac{d}{dm} \frac{d}{ds}$

continues on next page

PAGE, LINE	READS	SHOULD READ
p. 201, before table	<i>insert the following text before the table</i> —————→	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 $A = \frac{d}{d\tilde{m}} \frac{d}{dx}$. 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. 252, entry 78	Theorem 1.3 of [211], 5.15(9) of [91]	Theorem 1.3 of [211], 5.15(8), (9) of [91]
p. 302, item [193]	On sojourn times, ...	On sojourn times, ...

2

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