# Basic Stochastic Processes
# by Zdzisław Brzeźniak and Tomasz Zastawniak
# Springer-Verlag, London 1999
# Corrections in the 1st printing

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Page and line numbers refer to the 1st printing of the book.
A list of corrections in the 2nd printing is also available. Please see
`http://www-users.york.ac.uk/~tz506/bsp`
To make a comment or report further mistakes please contact the authors at
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Your feedback will be greatly appreciated!

$\text{vii}_3$ with discrete time `should be` in discrete time

$8_9$ $P(A) = P(A|B_1) + P(A|B_2) + \cdots$ `should be` $P(A) = P(A|B_1)P(B_1) + P(A|B_2)P(B_2) + \cdots$

$13_2$ $P\{\eta \geq t\}$ `should be` $P\{\eta \leq t\}$

$17^5$ This chapter is been designed `should be` This chapter is designed

$24_{13}$ $0 \notin C$ `should be` $2 \notin C$

$24_{12}$ $0 \in C$ `should be` $2 \in C$

$29_8$ $\eta$ `should be` $\zeta$

$30^3$ if $\xi$ is a step function `should be` if $\xi$ is a $\mathcal{G}$-measurable step function

$38^1$ $E(\xi|\eta)$ `should be` $E(\xi^2|\eta)$

$38_8$ $E(\xi|\eta)$ `should be` $E(\xi^2|\eta)$

$41^9$ $\xi$ `should be` $\zeta$

$41^{11}$ $\xi$ `should be` $\zeta$

$59_5$ $\bigcap_{n=1}^{\infty} P\{\tau > 2Kn\}$ `should be` $P\left(\bigcap_{n=1}^{\infty}\{\tau > 2Kn\}\right)$

$60^8$ `replace` 2) `by` 1)

$60^3$ $\sum_{n=1}^{\infty}$ `should be` $\sum_{n=0}^{\infty}$

$60^4$ $\sum_{n=1}^{\infty}$ `should be` $\sum_{n=0}^{\infty}$

$60^5$ $\sum_{n=1}^{\infty}$ `should be` $\sum_{n=0}^{\infty}$

$68_{11}$ $E\xi_\tau$ `should be` $E(\xi_\tau)$

$68_{11}$ `insert . at the end of the displayed equation`

$68_8$ $E\xi_\tau$ `should be` $E(\xi_\tau)$

$96^6$ Elschenbiden `should be` Elschenbieden

$97^{12}$ $\phi(0) = 0$ `should be` $\phi(0) = 1$

$100^8$ Elschenbiden `should be` Elschenbieden

$111^3$ $\pi := \sum_{j\in S} \pi_j \delta_j$ `should be` $\mu := \sum_{j\in S} \pi_j \delta_j$

$113^{10}$ `delete` recurrent

$115_{10}$ $\pi_j \sum_{s\in S} \pi_j p_r(s|i)$ `should be` $\pi_j \sum_{s\in S} p_r(s|i)$

$146_4$ $P\{\eta_1 > s\} \cdots P\{\eta_k > s\}$ `should be` $P\{\eta_1 > s_1\} \cdots P\{\eta_k > s_k\}$

$146_2$ $P\{\eta_1 > s\} \cdots P\{\eta_k > s\}$ `should be` $P\{\eta_1 > s_1\} \cdots P\{\eta_k > s_k\}$

$165_{11}$ $P\{\eta_1 > s\} \cdots P\{\eta_k > s\}$ `should be` $P\{\eta_1 > s_1\} \cdots P\{\eta_k > s_k\}$

$165_6$ $P\{\eta_1 > s\} \cdots P\{\eta_k > s\}$ `should be` $P\{\eta_1 > s_1\} \cdots P\{\eta_k > s_k\}$

$165_2$ $P\{\eta_1 > s\} \cdots P\{\eta_k > s\}$ `should be` $P\{\eta_1 > s_1\} \cdots P\{\eta_k > s_k\}$

$187_7$ We claim that `should be` by Jensen's inequality. We claim that

$190^1$ from definition `should be` from the definition

$190^8$ from definition `should be` from the definition

$191_{14}$ This has been proved in Proposition 7.1. `should be` This follows by approximating $1_{[0,t)}f$ by random step processes in $M^2_{\text{step}}$ and using Proposition 7.1.

$195_7$ is an Itô process. `should be` is an Itô process; see Exercise 7.8.

$196^{9,10}$ the latter `should be` which

$202^8$ of all functions `should be` in all functions

$203^{15}$ is a solution of `should be` satisfies

$203^{15}$ clearly satisfies `should be` also satisfies

$214_{2}$ , since `should be` , since by the Cauchy-Schwartz inequality

$215^{2,3,4}$ `lines 2,3,4 should be replaced by`

$$\leq n \sum_{i=0}^{n-1} E\left(\left|\int_{t_i^n}^{t_{i+1}^n} \big(W(t_{i+1}^n) - W(t)\big)\,dt\right|^2\right)$$

$$\leq n \sum_{i=0}^{n-1} \left(t_{i+1}^n - t_i^n\right) E\left(\int_{t_i^n}^{t_{i+1}^n} \left|W(t_{i+1}^n) - W(t)\right|^2 dt\right)$$

$$= n \sum_{i=0}^{n-1} \frac{\left(t_{i+1}^n - t_i^n\right)^3}{2} = n \sum_{i=0}^{n-1} \frac{T^3}{2n^3} = \frac{T^3}{2n} \to 0 \quad \text{as } n \to \infty.$$