Errata of the volume

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Several errors and misprints have find their way in the text. In the next pages you find the errata-corrige for the errors known to the authors up to now.
We will be very grateful to anybody who wants to inform us about further errors or just misprints or wants to express criticism or other comments. Our e-mail addresses are

`giuseppe.modica@unifi.it`, `laura.poggiolini@unifi.it`

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Giuseppe Modica

Laura Poggiolini

Page	Error	Correction
97 ↓ 6	h^n	h_n
158 ↓ 17	$\mathbb{E}[X_n]$	$\mathbb{E}[T_n] > 0$
175 ↓ 13 . . . 15	*for any . . . we have*	*for any couple of integers* n, k *with* $1 \le n \le k$, *for any couple of events* G, E *detected by* $X_0, \dots, X_{n-1}$ *and* $X_{n+1}, \dots, X_{n+k}$, *respectively, and for* $F := \{x \in \Omega \mid X_n = i\}$, $i \in S$, *we have*
176 ↓ 14	$\{X_n\}, r, k, n$	$\{X_n\}, k, n$
176 ↑ 19 . . . 17	and let . . . . Then	and let $n \in \mathbb{N}$, $I \subset S$ and $F = \cup_i F_i$ be a disjoint union of events of the type $F_i = \{x \in \Omega \mid X_n = i\} \cap H_i$ where H_i is detected by $X_0, \dots X_{n-1}$. Then
193 ↓ 11	Therefore,	Moreover,
193 ↓ 12	$i \to j$	$i \leftrightarrow j$
197 ↓ 11	solution	nonnegative solution
197 ↓ 13	further solution	further nonnegative solution
197 ↑ 9	a solution	a nonnegative solution
207 ↑ 10	*Proof.* Let	*Proof.* Brouwer theorem is a major result on the topology of $\mathbb{R}^N$ spaces. Here we only prove the claim assuming f is linear. Let
207 ↑ 9	$f^n(x)$	$f^k(x)$
223 ↓ 1	$i \to j$. Set	$i \to j$ with $f_{ij} = 1$. Set
224 ↓ 13	Assume $i \to j$.	Let $i, j \in S$. Assume either j is transient or j is recurrent and $f_{ij} = 1$.
225 ↑ 9	be a function.	be a function such that $\sum_{j \in S} \lvert\phi(j)\rvert < +\infty$.
225 ↑ 7	(i) By (i)	(i) Since $f_{ij} = 1$ $\forall i \in S$ if j is recurrent, by (i)

$226 \uparrow 8$	that $\sum_{i\in S}$	that $z_i \geq 0$, $\sum_{i\in S}$
$242 \downarrow 5$	(P1) $N_{I\cup J}$	(P1) $N_{\{0\}} = 0$ and $N_{I\cup J}$
$243 \downarrow 16$	are pairwise independent.	are independent.
$244 \downarrow 16$	$\mathbb{P}(X_{k,n} - \overline{X}_{k,n})$	$\mathbb{P}(X_{k,n} \neq \overline{X}_{k,n})$
$247 \downarrow 10$	for any $0 \leq r \leq s$..., we have	for any couple of integers $0 \leq r \leq s$, for any $t_0 \leq t_1 \leq \cdots \leq t_s$, for any couple of events G, E detected by $X_0, \dots, X_{t_{r-1}}$ and $X_{t_{r+1}}, \dots, X_{t_s}$, respectively, and for $F := \{x \in \mid X_{t_r} = i\}$, $i \in S$, we have

The proof of (i) of Proposition 5.30 is not complete. Here we provide the missing piece.

Proof. Let $m > 0$ be such that $p_{ji}^{(m)} > 0$. From Proposition 5.28

$$\begin{aligned}
1 = f_{jj} &= \mathbb{P}\left(X_n = j \text{ for infinitely many } n \,\middle|\, X_0 = j\right) \\
&= \mathbb{P}\left(X_n = j \text{ for some } n > m+1 \,\middle|\, X_0 = j\right) \\
&= \sum_{k\in S} \mathbb{P}\left(X_n = j \text{ for some } n \geq m+1, X_m = k \,\middle|\, X_0 = j\right) \\
&= \sum_{k\in S} \mathbb{P}\left(X_n = j \text{ for some } n \geq m+1 \,\middle|\, X_m = k\right) \mathbb{P}\left(X_m = k \,\middle|\, X_0 = j\right) \\
&= \sum_{k\in S} \mathbb{P}\left(X_n = j \text{ for some } n \geq 1 \,\middle|\, X_0 = k\right) p_{jk}^{(m)} = \sum_{k\in S} f_{kj} p_{jk}^{(m)}.
\end{aligned}$$

Since $\sum_{k\in S} p_{jk}^{(m)} = 1$, we conclude $f_{kj} = 1$ if $p_{jk}^{(m)} > 0$.