



Soviet-era science, translated into English

Correction

In Lemma 1 the inequality should read

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Abstract

Full Text

Correction

In my article (M. Rozenblat-Roth, “On the Strong Law of Large Numbers for Nonhomogeneous Markov Chains”), published in *DAN*, vol. 141, No. 6, 1961, the following corrections must be made.

In Lemma 1 the inequality should read

$$\mathbf{P} \left\{ \max_{1 \leq s \leq n} \left| \sum_{k=1}^s (\xi_k - \mathbf{M}\xi_k) \right| > \varepsilon \right\} \leq \frac{n^\beta}{\varepsilon^2} \sum_{i=1}^n \mathbf{D}\xi_i.$$

Lemma 2 should read:

Lemma 2. *In order that a sequence of random variables ξ_i ($i \in I$), connected in a Markov chain, satisfy the strong law of large numbers, it is necessary that, for every $\varepsilon > 0$, the condition*

$$\sum_{n=0}^{\infty} \mathbf{P}\{|\xi_n - \mathbf{M}\xi_n| > \varepsilon n \mid |\xi_{n-1} - \mathbf{M}\xi_{n-1}| \leq \varepsilon(n-1)\} < +\infty.$$

be fulfilled.

For $\alpha_i > \rho > 0$ ($i \in I$), whatever $\varphi(n) = o(n)$ may be, this condition ceases to be necessary if εn is replaced in it by $\varphi(n)$.

M. Rozenblat-Roth

Note: Figure translations are in progress. See original paper for figures.

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