

CORRECTIONS TO “CENTRAL LIMIT THEOREMS FOR EMPIRICAL MEASURES”

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In [1], page 926, line 15 is *not* $\leq 8(2n)^{2v} \sup(H)$. Let us correct this and some other errors and obscurities.

In the proof of (2.7), “(2.2)” should be “(2.6).”

In the last three lines of page 905, replace \Pr by Wichura’s probability measure, say \Pr_W . Take a sequence $\{h_m\}$ dense in the set of all uniformly continuous $h \notin B_{\delta, \varepsilon/2}$ on (\mathcal{C}, d_p) . Then

$$M := \bigcup_m B(h_m, \varepsilon/4) \in \mathfrak{B}_b \text{ in } D_0(\mathcal{C}, P),$$

$\Pr(v_n \notin M) < \varepsilon$ for n large enough (using P -EM), and $M \cap B_{\delta, \varepsilon} = \emptyset$, proving (b).

In (5.4), $\varepsilon/64$ should be $\varepsilon/96$. Two lines after (5.9), page 915, $4b_{i+1}$ should be $6b_{i+1}$; line 4 from below, 2^{i+1} should be 2^{i+2} ; last line, $2^i(2$ should be $2^i(4$; page 916, first line, 2 should be 4; on pages 916–917, $n \geq n_0$ should be $n > n_0$; on page 917, line 2, ε should be 3ε (twice). On page 921, 4th line after (7.3), $v \in \mathbb{R}^k$. Five lines further, delete “of H_N .” On page 922, (7.9), N should be n ; line 9, replace “ $n > k \geq 1$ ” by “ $n \geq k + 2 \geq 2$ ”; in the line after (7.10), replace “ $n < v$ ” by “ $2 \leq n \leq v$.”

On page 923, to clarify the choice of δ , in the proof of Theorem 7.1 after the third display, replace “Given a δ , $0 < \delta \leq 1$, to be chosen later,” by: “For $0 < \delta \leq 1$, $\mathcal{C}(\delta) \subset \mathcal{C}(1)$. Thus

$$N(\delta/2, \mathcal{C}(\delta), P) \leq N(\delta/2, \mathcal{C}(1), P) \leq N\delta^{-w}$$

for $0 < \delta < 1$. Then choose a $\delta := \delta_1(\varepsilon) > 0$ such that for $0 < \gamma \leq \delta_1(\varepsilon)$,

$$2N \sum_{j=1}^{\infty} 2^{jw} \gamma^{-w} \exp(-\varepsilon^2 2^j / (8j^4 \gamma)) < \varepsilon/3,$$

which is possible since: for each $\gamma > 0$, the series converges; the j th term converges to 0 as $\gamma \downarrow 0$, monotonically for $\gamma < \varepsilon^2 2^j / (8j^4 w) > 1$ for j large enough, so we have dominated convergence.”

Then on page 924, after the first display, replace the first three sentences “Now . . . $\delta = \delta_1(\varepsilon)$.” by “Then $S_1 < \varepsilon/3$ by choice of δ .” On page 925, line 7 up, $(P_n + P'_n)/2$.

In lines 5 and 4 up, replace “For fixed . . . P_{2n} ” by: “Let \mathcal{S}_{2n} be the σ -algebra of events $\{\langle X_1, \dots, X_{2n} \rangle \in V\}$ where $V \in \mathcal{Q}^{2n}$ and V is preserved by all $(2n)!$

Received April 4, 1979. Revised in proof, July 10, 1979.