

Correction to:
TOPOLOGICAL STABILITY OF SOLENOIDAL
AUTOMORPHISMS

NOBUO AOKI

The paper with the above title (Vol. 90, 1983, 119–135) contains omissions. They are in the proof (p. 134) of uniform continuity and uniform convergence of maps h_n stated in p. 133, $\ell \uparrow 3$.

The gaps are repaired as follows: Since (\mathbf{R}^r, γ) is expansive and ψ^* is 1-1 continuous, for every $\lambda > 0$ ($\lambda < \varepsilon$) there is $N \geq 0$ such that $x - y \in \psi^*B(\lambda)$ if $\sigma^j(x - y) \in \psi^*B(3\varepsilon)$ for $|j| \leq N$. Take $\alpha > 0$ such that if $d(x, y) < \alpha$ for $x, y \in \psi(\mathbf{R}^r)$ then $\max\{d(f_n^j(x), f_n^j(y)): |j| \leq N\} < \lambda$. Remark that $\psi^*B(\varepsilon) \oplus F(\varepsilon)$ is a closed neighborhood of 0 in X ; i.e. $\psi^*B(\varepsilon) \oplus F(\varepsilon) = \{x \in X: d(x, 0) \leq \varepsilon\}$. By (5), $\sigma^j\{h_n(x) - h_n(y)\} + \{f_n^j(x) - f_n^j(y)\} \in \psi^*B(2\varepsilon)$ for $|j| \leq N$ and hence $\sigma^j\{h_n(x) - h_n(y)\} \in \psi^*B(3\varepsilon) \oplus F(\lambda)$. Since $\bigcap_{-N}^N \sigma^{-j}\psi^*B(3\varepsilon) \subset \psi^*B(\lambda)$ and $\bigcap_{-N}^N \{\sigma^{-j}\psi^*B(3\varepsilon) \oplus F(\lambda)\} \subset \psi^*B(\lambda) \oplus F(\lambda)$, we have $d(h_n(x), h_n(y)) \leq \lambda$, i.e. h_n is uniformly continuous. Therefore h_n is extended to a continuous map of X into itself which is denoted by the same symbol.

Let λ nad N be as above. Since $\lim_{n,m} d(f_n^j, f_m^j) = 0$ for fixed j , there is $N(j) > 0$ such that $f_n^j(x) - f_m^j(x) \in \psi^*B(\lambda) \oplus F(\lambda)$ for $n, m \geq N(j)$. Thus by using (5), $h_n(x) - h_m(x) \in \sigma^{-j}\{\psi^*B(3\varepsilon) \oplus F(\lambda)\}$ for $n, m \geq N(j)$. Therefore for $n, m \geq \max\{N(j): |j| \leq N\}$ and $x \in X$, $h_n(x) - h_m(x) \in \psi^*B(\lambda) \oplus F(\lambda)$; i.e. $\{h_n\}$ converges uniformly to some continuous map.

Department of Mathematics
Tokyo Metropolitan University
Setagaya-ku, Tokyo 158
Japan

Received July 7, 1983.

