TOKYO J. MATH.
VOL. 20, NO. 2, 1997

Errata to "A Sufficient Condition for the Existence of Periodic Points of Homeomorphisms on Surfaces"

(Tokyo Journal of Mathematics, Vol. 18, No. 1 (1995), pp. 213–219)

Eijirou HAYAKAWA

Toyama University

(Communicated by T. Nagano)

The main theorem needs the additional assumption that $0 \notin \partial \mathrm{Conv}(\rho_1, \rho_2, \cdots, \rho_N) - \{\rho_1, \rho_2, \cdots, \rho_N\}$, and so the revised theorem is as follows:

THEOREM. *Let M be a connected orientable closed surface of genus $g>1$, and let $f: M \to M$ be a homeomorphism isotopic to the identity. Let $x_1, x_2, \cdots, x_N$ be periodic points of f, where $N=2g+1$, and let $\rho_1, \rho_2, \cdots, \rho_N$ be rotation vectors for these periodic points. Set $P=\{x_1, x_2, \cdots, x_N\}$.*

Assume that $\mathrm{Conv}(\rho_1, \rho_2, \cdots, \rho_N)$ does not include 0 on its boundary except vertices and has an interior point ρ_0 corresponding to a periodic point of the blowing up homeomorphism $\hat{f}: M_P \to M_P$ belonging to an $mk(P)-$Nielsen class of non-zero index for some $m>0$. Then

i) *f is isotopic to a generalized pseudo-Anosov homeomorphism,*

ii) *there exists a dense subset of $\mathrm{Conv}(\rho_1, \rho_2, \cdots, \rho_N)$ that consists of rotation vectors for periodic points.*

The quite same proof as given in the original publication works to prove this revised theorem.

Present Address:
FACULTY OF ENGINEERING, TOYAMA UNIVERSITY,
GOFUKU, TOYAMA, 930 JAPAN.

Received June 24, 1997