

Corrigenda

Volume 74 (1973), 29–38

N. MARTIN. ‘Transverse regularity for maps of homology manifolds’

An example given by Galewski and Stern (1) showed that Theorem A of the original paper was false as stated. The error is traceable to the codimension three condition which is not sufficient here.

The codimension three condition was required in the proof of Lemma 1 of the original but in fact rather than being a restriction on the dimensions of the manifolds concerned it should have related to the non-degeneracy condition of the large manifold relative to the dimension of the smaller. Thus a correct version of Theorem A would be:

THEOREM A. *Let M^m be a homotopy m -manifold, P^p a proper homology submanifold of N^n , a homology manifold, and suppose that $f: M \rightarrow N$ is a proper map of manifolds. Then if N is $ND(s)$, where $s - p \geq 3$, f is homotopic to a proper PL map $g: M \rightarrow N$ such that $g^{-1}(P)$ is a proper $(p + m - n)$ -submanifold of M and g induces a bundle map from the normal bundle of $g^{-1}(P)$ in M to that of P in N .*

If the ND condition is not available then we have to resort to a stabilization procedure (as in Theorem B of the original) giving the following alternative formulation.

THEOREM A’. *Let M^m be a homotopy m -manifold, P^p a proper homology submanifold of N^n , a homology manifold, and suppose that $f: M \rightarrow N$ is a proper map of manifolds. Then there exists an integer $k \geq 0$ and a PL map $g: M \times D^k \rightarrow N \times D^k$ such that $g^{-1}(P \times \{0\})$ is a proper $(p + m - n) -$ submanifold of $M \times D^k$, g induces a bundle map between the normal bundle of $g^{-1}(P \times \{0\})$ in $M \times D^k$ and the normal bundle of $P \times \{0\}$ in $N \times D^k$ and g is homotopic to $f \times 1_{D^k}$.*

REFERENCE

- (1) GALEWSKI, D. E. and STERN, R. J. The relationship between homology and topological manifolds via homology transversality, *Inventiones Math.* **39** (1977), 277–292.

Volume 88 (1980), 193–197

E. M. WRIGHT. ‘A quadratic recurrence of Faltung type.’

Middle of p. 197. The value of x ($-\frac{1}{3}$) should be

$$x\left(-\frac{1}{3}\right) = 0.351298985\dots = e^{-1} \times 0.95492965\dots$$

The error was mine and not Dr Ponting’s.