## ERRATA, VOLUME 16

G. K. Leaf, *An approximation theorem for a class of operators*, pp. 991–995.

It has been pointed out to the author by Y. Domar that Theorem 2 of the author's paper [2] is not correct as stated. In this note the correct form of the theorem is given together with a brief sketch of the proof.

The theorem is a generalization of an approximation theorem for unitary operators in Hilbert space to certain classes of operators in Banach spaces. The class is defined by the following restrictions. Let $V$ be any bounded invertible operator in a Banach space $B$ which satisfies the following two conditions.

(i) $\| V^n\| = O(|n|^q)$ as $|n|$ tends to infinity for some positive integer $q$.

(ii) $\lim \inf_{|n| \to \infty} \| V^n\| \, |n|^{-q} = 0$.

If $V$ satisfies these conditions, then the correct version of Theorem 2 is as follows.

THEOREM 2. *Given any $\epsilon > 0$ there exists a $\delta > 0$ such that for any $\lambda$ with $-\pi < \lambda < \pi$ and any element $a$ in $B$ which lies in the subspace $L(\lambda) = \{a \text{ in } B: \sigma(a) \subseteq [\lambda - \delta, \lambda + \delta]\}$ we have*

$$\|(V - e^{i\lambda})^q a\| \leqq \epsilon \|a\|.$$

*Moreover the space $B$ is spanned by a finite collection of such manifolds.*

The proof rests on the following lemma (Lemma 3.42 in [1]) due to Domar.

LEMMA. *Let $\{P_n\}_{-\infty}^{\infty}$ be a sequence of positive numbers such that for some positive integer $q$, the sequence satisfies the conditions*

(a) $P_n = O(|n|^q)$, *and*

(b) $\lim \inf_{|n| \to \infty} P_n |n|^{-q} = 0$.

Let the function $f(\theta)$ be continuous in $[-\pi, \pi]$ together with its first $q$ derivatives and vanishing at $\theta = \theta_0$ together with its first $q-1$ derivatives. Moreover suppose that $f^{(q)}(\theta)$ has an absolutely convergent Fourier series. Then for every $\epsilon > 0$ we can find a function $g(\theta)$ with an absolutely convergent Fourier series such that

$$\sum_{-\infty}^{\infty} P_n |g_n| < \epsilon,$$

and

$$g(\theta) \equiv f(\theta) \text{ in some interval around } \theta = \theta_0.$$

For the special case of $q=1$ we have the following corollary.

COROLLARY. If $q=1$ and $a\neq 0$, then $\sigma(a)=\{\lambda_0\}$ if and only if $V_a=e^{i\lambda_0}a$.

## REFERENCES

1. Y. Domar, *Harmonic analysis based on certain commutative Banach algebras*, Acta Math. **96** (1956), 2–66.

2. G. K. Leaf, *An approximation theorem for a class of operators*, Proc. Amer. Math. Soc. **16** (1965), 991–995.

Kunio Murasugi, *On the center of the group of a link*, pp. 1052–1057.

Lemma 3 is valid only for a primitive link in 3-space. A link $l$ is said to be *primitive* if no disconnected orientable surfaces span $l$. Then, the group of a nonprimitive link has a trivial center. This is an immediate consequence of Theorem 1 in B. C. Schaufele, *A note on link groups* (Bull. Amer. Math. Soc. **72** (1966), 107–110). (However, this proposition is proved directly without use of Schaufele's result.) Thus, the proofs of the theorems remain unchanged. I am much indebted to Schaufele for pointing out that this assumption was missing in Lemma 3.

## ERRATA, VOLUME 17

H. A. Smith, *Tensor products of locally convex algebras*, pp. 124–131.

Arlen Brown and Carl Pearcy, *Spectra of tensor products of operators*, pp. 162–166.

The footnotes on these two articles were reversed.

On page 124 read
Presented to the Society, August 27, 1964 under the title *Tensor products of completely locally m-convex algebras* and November 25, 1964 under the title *Tensor products of complete commutative locally m-convex Q-algebras*; received by the editors January 29, 1965.
On page 162 read
Received by the editors June 29, 1964.

R. M. Cohn, *An existence theorem for difference polynomials*, pp. 254–261.

Page 255, line 21: Remove remark in parentheses and replace by: "when all the functions involved are restricted to any subinterval of [0, 1]."