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ERRATUM TO "THE NONSTANDARD THEORY OF TOPOLOGICAL VECTOR SPACES"

BY

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The authors are indebted to Steven F. Bellenot for pointing out an error in the proof of Theorem 6.2 (i). (The $\sigma(F, E)$-continuity of g on U^0 need not imply the $\sigma(F, E)$-continuity of g on the span of U^0.)

The following is a brief sketch of a proof of Theorem 6.2 (i). By Theorem 16.8 of [2], for each θ-neighborhood U of 0, each finite subset $y_1, y_2, \cdots, y_n$ of F and each $\epsilon > 0$, there exists $x \in E$ such that $|\langle x, y\rangle - \langle g, y\rangle| < \epsilon$ for all $y \in \operatorname{span}\{y_1, \cdots, y_n\} + U^0$. In particular $\langle x, y_i\rangle = \langle g, y_i\rangle$ for $i = 1, 2, \cdots, n$. Hence there exists $p \in {}^*E$ such that $\langle p, q\rangle =_1 \langle {}^*g, q\rangle$ for $q \in M_\theta$ and $\langle p, {}^*y\rangle = \langle g, y\rangle$ for $y \in F$. Then $p \in [M_\theta \cap \mu_{\sigma(F,E)}(0)]^i = pns_\theta({}^*E)$, since g is $\sigma(F, E)$-continuous on each θ-equicontinuous subset of F, and so p satisfies the required conditions.

REFERENCES

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