

Erratum to the paper:

IDEALS OF HOMOGENEOUS POLYNOMIALS AND WEAKLY  
COMPACT APPROXIMATION PROPERTY IN BANACH SPACES

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ERHAN ÇALIŞKAN, İstanbul

In the proof of the implication (c)  $\implies$  (a) of Theorem 11 we state that  $P^m \in \mathcal{P}_{\mathcal{W}}(^m E; F)$  since  $P^m = Q \circ R$  with  $R \in \mathcal{W}(E; G)$ ,  $Q \in \mathcal{P}(^m G; F)$  and  $G$  Banach. But since  $\mathcal{P}_{L[\mathcal{W}]}$  is not contained in  $\mathcal{P}_{\mathcal{W}}$  (see, e.g., example 27 in G. Botelho: Ideals of polynomials generated by weakly compact operators, Note Mat. 25 (2006), 69–102) this conclusion is not true in general. So the given proof of this implication is not true. The proof of Theorem 11 can be completed as follows:

(c)  $\implies$  (a): By following the pattern of the proof of Lemma 9, having the equality  $\mathcal{P}_{[\mathcal{W}]}(^m E; F) = \mathcal{P}_{L[\mathcal{W}]}(^m E; F)$  in mind, one can prove that if  $\mathcal{P}(^m E; F) = \overline{\mathcal{P}_{[\mathcal{W}]}(^m E; F)}^{\tau_c}$  for every Banach space  $F$  and for some  $m \in \mathbb{N}$  then,  $L(E; F) = \overline{\mathcal{W}(E; F)}^{\tau_c}$  for every Banach space  $F$ . This shows that  $E$  has the WCAP.