

ERRATA
CORRECTION TO
DENTABILITY, TREES, AND
DUNFORD-PETTIS OPERATORS ON L_1

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A Banach space has the complete continuity property if all its bounded subsets are midpoint Bocce dentable. We show that a lemma used in the original proposed proof of this result is false; however, we give a proof to show that the result is indeed true.

1. Introduction. Throughout this paper, \mathfrak{X} denotes an arbitrary Banach space, \mathfrak{X}^* the dual space of \mathfrak{X} , $B(\mathfrak{X})$ the closed unit ball of \mathfrak{X} , and $S(\mathfrak{X})$ the unit sphere of \mathfrak{X} . The triple (Ω, Σ, μ) refers to the Lebesgue measure space on $[0, 1]$, Σ^+ to the sets in Σ with positive measure, and L_1 to $L_1(\Omega, \Sigma, \mu)$. The σ -field generated by a partition π of $[0, 1]$ is $\sigma(\pi)$. The conditional expectation of $f \in L_1$ given a σ -field \mathcal{B} is $E(f|\mathcal{B})$.

A Banach space \mathfrak{X} has the *complete continuity property* (CCP) if each bounded linear operator from L_1 into \mathfrak{X} is *Dunford-Pettis* (i.e. carries weakly convergent sequences onto norm convergent sequences). Since a representable operator is Dunford-Pettis, the CCP is a weakening of the Radon-Nikodým property (RNP). Recall that a Banach space has the RNP if and only if all its bounded subsets are dentable. A subset D of \mathfrak{X} is *dentable* if for each $\varepsilon > 0$ there is x in D such that $x \notin \overline{\text{co}}(\{y \in D: \|x - y\| \geq \varepsilon\})$. Midpoint Bocce dentability is a weakening of dentability. The subset D is *midpoint Bocce dentable* if for each $\varepsilon > 0$ there is a finite subset F of D such that for each x^* in $B(\mathfrak{X}^*)$ there is x in F satisfying:

$$\text{if } x = \frac{1}{2}z_1 + \frac{1}{2}z_2 \text{ with } z_i \in D \text{ then } |x^*(x - z_1)| \equiv |x^*(x - z_2)| < \varepsilon.$$

The following theorem is presented in [G1].

THEOREM 1. *\mathfrak{X} has the CCP if all bounded subsets of \mathfrak{X} are midpoint Bocce dentable.*