



Ginés López Pérez (glopezp@ugr.es), Departamento de Análisis Matemático, Facultad de Ciencias, University of Granada, 18071 Granada, Spain, *Point of continuity property without ℓ_1 -sequences*.

ABSTRACT. In [1] it is proved that every seminormalized basic sequence in a Banach space satisfying the point of continuity property has a boundedly complete basic subsequence and it is posed the question whether the converse is true for Banach spaces not containing ℓ_1 . We answer by the negative to this question. Also, we prove that a Banach space not containing ℓ_1 , satisfies the point of continuity property if, and only if, every semi-normalized weakly null tree has a basic boundedly complete branch, which improves some results in [2]. Finally, we show that the above characterization fails in general. We recall that a Banach space satisfies the point of continuity property if every nonempty closed and bounded set has some point where the weak and norm topologies agree. The well known Radon-Nikodym property implies the point of continuity property.

[1] H. P. Rosenthal. *Boundedly complete weak-Cauchy basic sequences in Banach spaces with PCP*. J. Funct. Anal. 253 (2007), 772-781.

[2] S. Dutta, V. P. Fonf. *On tree characterizations of G_δ -embeddings and some Banach spaces*. Israel J. Math. 167 (2008), 27-48.