WUR MODULUS AND NORMAL STRUCTURE IN BANACH SPACES

JI GAO

Communicated by T. Schlumprecht

ABSTRACT. Let $X$ be a Banach space. In this paper, we study the properties of wUR modulus of $X$, $\delta_X(\varepsilon, f)$, where $0 \leq \varepsilon \leq 2$ and $f \in S(X^*)$, and the relationship between the values of wUR modulus and reflexivity, uniform non-squareness and normal structure, respectively. Among other results, we proved that if $\delta_X(1, f) > 0$, for any $f \in S(X^*)$, then $X$ has weak normal structure.

REFERENCES

10. B. Sims, “Ultra”-techniques in Banach space theory, Queen’s Papers in Pure and Applied Mathematics, 60. Queen’s University, Kingston, ON, 1982.

Department of Mathematics, Community College of Philadelphia, PA 19130-3991, USA.
E-mail address: jgao@ccp.edu