

WEYL'S THEOREM, a -WEYL'S THEOREM AND SINGLE-VALUED EXTENSION PROPERTY

PIETRO AIENA AND CARLOS CARPINTERO

ABSTRACT. In this paper we investigate the relation of Weyl's theorem, of a -Weyl's theorem and the single valued extension property. In particular, we establish necessary and sufficient conditions for a Banach space operator T to satisfy Weyl's theorem or a -Weyl's theorem, in the case in which T , or its dual T^* , has the single valued extension property. These results improve similar results obtained by Curto and Han, Djordjević S. V., Duggal B. P., and Y. M. Han . The theory is exemplified in the case of multipliers of commutative semi-simple Banach algebras, in particular convolution operators on the group algebra $L^1(G)$, weighted shift operators on $\ell^p(\mathbb{N})$, with $1 \leq p < \infty$, as well as other classes of operators.

DIPARTIMENTO DI MATEMATICA ED APPLICAZIONI, FACOLTÀ DI INGEGNERIA, UNIVERSITÀ DI PALERMO, VIALE DELLE SCIENZE, I-90128 PALERMO (ITALY), E-MAIL PAIENA@UNIPA.IT

DEPARTAMENTO DE MATEMÁTICAS, FACULTAD DE CIENCIAS, UNIVERSIDAD DE ORIENTE, CUMANÁ (VENEZUELA), E-MAIL C CARPI@CUMANA.SUCRE.UDO.VE

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