A NOTE ON NONDISTINGUISHED KÖTHE SPACES OF INFINITE TYPE

Carmen FERNÁNDEZ

Departamento de Análisis Matemático, Facultad de Matemáticas
Universidad de Valencia, Dr. Moliner 50, E-46100 Burjassot (Valencia) Spain

ABSTRACT: In this note it is proved that if $\lambda_\infty(A)$ is any nondistinguished Köthe echelon space of infinite order, then there is a linear form on its strong dual $(\lambda_\infty(A))'_b$ which is locally bounded (i.e. bounded on the bounded sets) but not continuous.