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Granada, 18071 Granada, Spain, *The alternative
Dunford-Pettis property for subspaces of the
compact operators.*

ABSTRACT. A Banach space X has the alternative Dunford-Pettis property if for every weakly convergent sequences $(x_n) \rightarrow x$ in X and $(x_n^*) \rightarrow 0$ in X^* with $\|x_n\| = \|x\| = 1$ we have $(x_n^*(x_n)) \rightarrow 0$. We get a characterization of certain operator spaces having the alternative Dunford-Pettis property. As a consequence of this result, if H is a Hilbert space we show that a closed subspace M of the compact operators on H has the alternative Dunford-Pettis property if, and only if, for any $h \in H$, the evaluation operators from M to H given by $S \mapsto Sh$, $S \mapsto S^t h$ are DP1 operators, that is, they apply weakly convergent sequences in the unit sphere whose limits are also in the unit sphere into norm convergent sequences. We also prove a characterization of certain closed subalgebras of $K(H)$ having the alternative Dunford-Pettis property by assuming that the multiplication operators are DP1.