ADDENDUM TO

"REMARKS ON WEAK COMPACTNESS OF OPERATORS DEFINED ON CERTAIN INJECTIVE TENSOR PRODUCTS"

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The idea (used in [1]) of embedding $X \otimes_{\varepsilon} Y$ into $X^{**} \otimes_{\varepsilon} Y$, when $X$ is an $\mathcal{L}_\infty$ space can also be used to get the following results.

**Theorem 1.** Let $X$ be an $\mathcal{L}_\infty$ space and $Y$ a Banach space. Then $X \otimes_{\varepsilon} Y$ contains a complemented copy of $l^1$ iff $Y$ does the same.

**Proof.** If $l^1$ embeds complementably into $X \otimes_{\varepsilon} Y$, then $c_0$ embeds into $(X \otimes_{\varepsilon} Y)^*$, a closed subspace of $(X^{**} \otimes_{\varepsilon} Y)^*$; then $l^1$ embeds complementably into $X^{**} \otimes_{\varepsilon} Y$, that is, a complemented subspace of some $C(K, Y)$ space (see Theorem 2 of [1]). Hence, it is enough to apply the main result of [2] to get our thesis.

**Theorem 2.** Let $X$ be a Banach space with $X^*$ isometric to an $L^1$ space. If $Y$ is a reflexive Banach space, then $X \otimes_{\varepsilon} Y$ has property (V) of Pelczynski.

**Proof.** Let $T$ be an unconditionally converging operator on $X \otimes_{\varepsilon} Y$. The results of [3] imply that $T^{**}$ is unconditionally converging, too. Hence $T^{**}$ restricted to $X^{**} \otimes_{\varepsilon} Y$ is unconditionally converging; since $X^{**} \otimes_{\varepsilon} Y$ is complemented in some $C(K, Y)$ space, it inherits property (V) of Pelczynski. Hence $T^{**}$, and so $T$, are weakly compact. We are done.

**REFERENCES**


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