1067-46-518

Michelle R Craddock\* (michelle.craddock@usma.edu), 646 Swift Road, Department of Mathematical Sciences, Thayer Hall 253, West Point, NY 10996. *Reflexivity and Grothendieck Space Property for Positive Tensor Products of Banach Lattices.* 

Let X be a Banach lattice and let  $1 < p, q < \infty$  such that 1/p + 1/q = 1. Then  $\ell_p \hat{\otimes}_F X$  (respectively,  $\ell_p \tilde{\otimes}_i X$ ), the Fremlin projective (respectively, the Wittstock injective) tensor product of  $\ell_p$  and X, has reflexivity or the Grothendieck space property if and only if X has the same property and each positive operator from  $\ell_p$  (respectively, from  $\ell_q$ ) to  $X^*$ (respectively, to  $X^{**}$ ) is compact. (Received September 08, 2010)