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**Qingying Bu** and **Byunghoon Lee\*** (blee4@olemiss.edu), Department of Mathematics,  
University of Mississippi, Oxford, MS 38677. *On Positive Tensor Products of  $\ell_p$ -spaces.*

For  $1 \leq p_1, \dots, p_n < \infty$ , we characterize the main diagonals of the positive projective tensor product  $\ell_{p_1} \hat{\otimes}_{|\pi|} \cdots \hat{\otimes}_{|\pi|} \ell_{p_n}$  and the positive injective tensor product  $\ell_{p_1} \check{\otimes}_{|\epsilon|} \cdots \check{\otimes}_{|\epsilon|} \ell_{p_n}$ . Then by using these two main diagonals, we characterize the reflexivity, the property of being Kantorovich-Banach spaces, and the property of being order continuous of  $\ell_{p_1} \hat{\otimes}_{|\pi|} \cdots \hat{\otimes}_{|\pi|} \ell_{p_n}$  and  $\ell_{p_1} \check{\otimes}_{|\epsilon|} \cdots \check{\otimes}_{|\epsilon|} \ell_{p_n}$ , as well as the space of all regular  $n$ -linear forms on  $\ell_{p_1} \times \cdots \times \ell_{p_n}$  and the space of all regular  $n$ -homogeneous polynomials on  $\ell_p$  ( $1 \leq p < \infty$ ). (Received September 15, 2014)