

**Grzegorz Lewicki**

***Strong unicity criterion in some space of operators***

Comment.Math.Univ.Carolinae 34,1 (1993) 81-87.

**Abstract:** Let  $X$  be a finite dimensional Banach space and let  $Y \subset X$  be a hyperplane. Let  $\mathcal{L}_Y = \{L \in \mathcal{L}(X, Y) : L|_Y = 0\}$ . In this note, we present sufficient and necessary conditions on  $L_0 \in \mathcal{L}_Y$  being a strongly unique best approximation for given  $L \in \mathcal{L}(X)$ . Next we apply this characterization to the case of  $X = l_\infty^n$  and to generalization of Theorem I.1.3 from [12] (see also [13]).

**Keywords:** best approximation, strongly unique best approximation, approximation in spaces of linear operators

**AMS Subject Classification:** Primary 41A65, 41A52, 41A35