

1014-47-1741

Masayoshi Kaneda* (mkaneda@math.uci.edu), Department of Mathematics, University of California, Irvine, Irvine, CA 92697-3875. *The Answer to Blecher's Open Question about Properties (L) and (R).*

Quasi-multipliers of operator spaces were defined by Paulsen in early 2003 as natural variations of one-sided multipliers of operator spaces which had been introduced by Blecher. Soon after, I discovered significant relation between quasi-multipliers and operator algebra products. That is, the bilinear mappings that make a given operator space an operator algebra are precisely the ones that are implemented by contractive quasi-multipliers. Here, we study extreme points of contractive quasi-multipliers, and see that they are closely related to (one-sided) contractive approximate identities. As a corollary, we solve an open problem about Properties (L) and (R) raised by Blecher in 2001. (Received September 29, 2005)