

1047-47-311

Victor Kaftal* (kaftal@math.uc.edu), Department of Mathematical Sciences, University of Cincinnati, Cincinnati, OH 45221-0015. *Strong sums of projections*. Preliminary report.

Which positive operators (in a von Neumann algebra) are strong sums of projections? In a recent paper (K,Ng, and Zhang) we found a necessary and sufficient condition for countably generated factors of type I, III, and in certain cases of type II. The technique used is based on a two by two matrix construction with further applications to frame theory and the study of diagonals of positive operator (work in progress with D. Larson.) (Received February 01, 2009)