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*AM-Compactness of some classes of operators*

Comment.Math.Univ.Carolin. 53,4 (2012) 509 –518.

**Abstract:** We characterize Banach lattices on which each regular order weakly compact (resp. b-weakly compact, almost Dunford-Pettis, Dunford-Pettis) operator is AM-compact.

**Keywords:** AM-compact operator, order weakly compact operator, b-weakly compact operator, almost Dunford-Pettis operator, b-AM-compact operator, order continuous norm, discrete Banach lattice

**AMS Subject Classification:** 46A40, 46B40, 46B42

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