

A NOTE ON REPRESENTATIONS OF COMMUTATIVE C^* -ALGEBRAS IN SEMIFINITE VON NEUMANN ALGEBRAS

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Abstract. In the current paper, we generalize the “compact operator” part of D. Voiculescu’s non-commutative Weyl-von Neumann theorem on approximately unitary equivalence of unital $*$ -homomorphisms of a separable commutative C^* -algebra \mathcal{A} into a semifinite von Neumann algebra. A result of D. Hadwin for approximate summands of representations into a finite von Neumann factor \mathcal{R} is also extended.

Mathematics subject classification (2010): Primary 47C15.

Keywords and phrases: Approximate equivalence, Weyl-von Neumann theorem, Voiculescu Theorem, semifinite von Neumann algebras.

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