2-LOCAL DERIVATIONS ON ALGEBRAS OF LOCALLY MEASURABLE OPERATORS

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Communicated by Z. Lykova

Abstract. The paper is devoted to 2-local derivations on the algebra \( \mathcal{LS}(M) \) of all locally measurable operators affiliated with a type \( I_\infty \) von Neumann algebra \( M \). We prove that every 2-local derivations on any \( * \)-subalgebra \( \mathcal{A} \) in \( \mathcal{LS}(M) \), such that \( M \subseteq \mathcal{A} \), is a derivation.

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Date: Received: 26 September 2012; Accepted: 17 January 2013.
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2010 Mathematics Subject Classification. Primary 46L51; Secondary 47B47.
Key words and phrases. measurable operator, derivation, 2-local derivation.