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Daniel J Hoff* (d1hoff@ucsd.edu). *Unique Prime Factorization for Von Neumann Algebras of Equivalence Relations.*

A tracial von Neumann algebra M is called prime if it cannot be decomposed as the tensor product of two nontrivial (not type I) subalgebras. Naturally, if M is not prime, one asks if M can be uniquely factored as a tensor product of prime subalgebras. The first result in this direction is due to Ozawa and Popa in 2003, who gave a large class of groups \mathcal{C} such that for any $\Gamma_1, \dots, \Gamma_n \in \mathcal{C}$, the associated von Neumann algebra $L(\Gamma_1) \overline{\otimes} \cdots \overline{\otimes} L(\Gamma_n)$ is uniquely factored. This talk will focus on von Neumann algebras arising from a class of measured equivalence relations, and how the techniques of Ozawa and Popa can be adapted to this setting. (Received August 25, 2015)