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Stefaan Vaes* (stefaan.vaes@wis.kuleuven.be), Department of Mathematics, K.U.Leuven, Celestijnenlaan 200B, B-3001 Leuven, Belgium. *A class of group factors $L(G)$ that remember the group G .*

I will report on a recent joint work with Sorin Popa and Adrian Ioana in which we prove that for a fairly large class of generalized wreath product groups G , the associated von Neumann algebra $L(G)$ completely ‘remembers’ the group G . More precisely, if $L(G)$ is isomorphic to the von Neumann algebra $L(\Lambda)$ of an arbitrary countable group Λ , then Λ must be isomorphic to G . These represent the first superrigidity results pertaining to group von Neumann algebras. (Received August 11, 2010)