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Sujan Pant*, 621 Elmer circle, Reading, PA 19605, and **Rolando De Santiago**. *Primeness results for group von Neumann Algebra.*

We provide a new example of prime von Neumann algebra. We expand upon methods used in earlier work by the first author, and demonstrate that the group von Neumann algebra $L(\Gamma)$ of a poly-hyperbolic group is a tensor product of k diffuse II_1 factors precisely when Γ is commensurable to a direct product of k poly-hyperbolic groups. We improve on the second author's previous work to provide group-level criteria for determining whether a group von Neumann algebra is prime, i.e., $L(\Gamma)$ is prime precisely when the group is (virtually) indecomposable as a direct product of non-amenable groups.

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