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John B. Garnett* (jbg@math.ucla.edu), Dept. of Mathematics, UCLA, 405 Hilgard Ave., Los Angeles, CA 90095, **Rowan Killip** (killip@math.ucla.edu), Department of Mathematics, UCLA, 405 Hilgard Ave., Los Angeles, CA 90095, and **Rannan Schul** (schul@math.sunysb.edu), Department of Mathematics, Stony Brook University, Stony Brook, NY 11794. *A doubling measure in the plane can give mass to a rectifiable curve.*

We present an example of a doubling measure on the plane, i.e. a positive Borel measure μ such that $\mu(A) \leq C\mu(B)$ when A and B are adjacent squares of the same diameter and C is an absolute constant, and a rectifiable curve Γ such that $\mu(\Gamma) > 0$. (Received February 16, 2010)