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Local monotonicity of Hausdorff measures restricted to real analytic curves

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Abstract: We prove that the 1-dimensional Hausdorff measure restricted to a simple real analytic curve $\gamma: \mathbb{R} \to \mathbb{R}^N$, $N \geq 2$, is locally 1-monotone.

Keywords: monotone measure, monotonicity formula AMS Subject Classification: 53A10, 49Q15, 28A75

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