

1135-51-1386

C. Connell, X. Dai, R. Perales, J. Núñez-Zimbrón, P. Suárez-Serrato and G. Wei*
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Rigidity For RCD Spaces.*

Volume entropy measures the exponential growth rate of the volume of balls in the universal cover. It's related to the topological entropy, minimal volume, bottom spectrum of the Laplacian of the universal cover, among others. For Riemannian manifolds M^n with Ricci curvature $\geq -(n-1)$, the volume entropy is $\leq n-1$. Ledrappier-Wang showed the rigidity that the equality holds iff M^n is hyperbolic. We extend this to $RCD(-(N-1), N)$ spaces. While the upper bound follows quickly, the rigidity case is quite involved due to lack of smooth structure in RCD spaces. (Received September 22, 2017)