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Bi-Lipschitz decomposition of Lipschitz functions into a metric space.

We will outline the proof of a quantitative version of the following statement. Given a Lipschitz function f from the k -dimensional unit cube into a general metric space, one can decomposed f into a finite number of Bi-Lipschitz functions $f|_{F_i}$ so that the k -Hausdorff content of $f([0, 1]^k \setminus \cup F_i)$ is small. The case where the metric space is \mathbb{R}^d is a theorem of P. Jones (1988). (Received March 10, 2008)