Concerning quantization for probability measures in complete metric spaces.

The theory of quantization for probability measures \( \mu \) supported on a compact set in \( \mathbb{R}^n \) has received considerable attention in the literature. The existing literature on quantization concentrates primarily on an invariant measure \( \mu \) associated with an iterated function system. Building on the literature, this contribution aims to extend the theory of quantization in a complete metric space. In particular, this provides a formula for quantization dimension of an invariant measure \( \mu \) associated with an iterated function system consisting of a finite number of contractive infinitesimal similitudes in a complete metric space. Not unexpectedly, this constitutes a generalization of the known result on quantization dimension of a self-similar measure in the Euclidean space. This note also records the continuous dependence of quantization dimension of \( \mu \) on the parameters involved in its definition. (Received September 15, 2020)