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"Nagata Dimension, Hyperbolic Metric Spaces, and Stochastic Embeddings"

This talk is based on ongoing work of the speaker. We will discuss the stochastic embeddability of snowflakes of finite Nagata-dimensional spaces into ultrametric spaces and the induced stochastic embeddings of their hyperbolic fillings into trees. Several results follow as applications : (1) For any uniformly concave gauge ω, the Lipschitz free space over $([0,1]^n, \omega \circ d)$ is isomorphic to ℓ_1, where d is the Euclidean metric on the finite dimensional cube $[0,1]^n$. (2) The Lipschitz free space over every finitely generated Gromov hyperbolic group is isomorphic to ℓ_1. (3) The Lipschitz free space over the n-dimensional hyperbolic space $\mathbb{H}^n$ is isomorphic to the Lipschitz free space over $\mathbb{R}^n$.