

LIPSCHITZ-FREE SPACES THAT EMBED INTO ℓ_1

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ABSTRACT. It is known that if a Lipschitz-free space $\mathcal{F}(M)$ embeds isometrically into ℓ_1 , then the underlying metric space M must embed isometrically into a separable \mathbb{R} -tree and its canonical measure must be zero. Moreover, if M is compact then the converse is also true. We investigate the validity of the converse in the general case, and give the following partial answer: for any such M , the space $\mathcal{F}(M)$ embeds isomorphically into ℓ_1 with distortion $1 + \varepsilon$ for any $\varepsilon > 0$. This is a joint work with C. Petitjean and A. Procházka.