On Lipschitz free space over countable compact metric space

Aude DALET (Laboratoire de Mathématiques de Besançon — France) Friday, February 7, 12:40–13:00, Aula Gris 1

Let M be a pointed metric space and $Lip_0(M)$ the space of Lipschitz functions vanishing at 0. Endowed with the Lipschitz norm this space is a Banach space. Its unit ball being compact for the pointwise topology, it is a dual space. Let us call its canonical predual the Lipschitz-free space over M, denoted $\mathcal{F}(M)$.

Despite the simplicity of the definition of $\mathcal{F}(M)$ very little is known about their linear structure. In this talk we will study spaces with Lipschitz-free space having bounded approximation property and being dual space, in particular compact or proper countable metric spaces.