Gilles Lancien (Université de Franche Comté, France)

Title: Approximation properties, decompositions and Schauder bases in free spaces

Abstract: If M is a metric space with a distinguished origin, then $\mathcal{F}(M)$ is the natural predual of the space of real valued Lipschitz functions that vanish at the origin. The linear structure of these spaces is often very difficult to describe. In this talk we will try to give an overview of what is known about the existence of Schauder bases or finite dimensional decompositions or about the bounded approximation property for Lipschitz free spaces. This will include former results by Godefroy and Kalton, a recent work by Godefroy and Osawa and a joint work with P. Hájek and E. Pernecka.
