On (complemented) Brunn-Minkowski type inequalities for measures

Jesús Yepes Nicolás

Universidad de Murcia

In this talk, we will discuss various functional and geometric forms of Brunn-Minkowski type inequalities, in both its classical form and its complemented version. We will study these inequalities in the setting of different absolutely continuous measures on $\mathbb{R}^n$ with radially decreasing densities, by paying special attention to the cases of the volume (the n-dimensional Lebesgue measure) and the standard Gaussian measure. Furthermore, we will show some other related inequalities when involving different operations between subsets of $\mathbb{R}^n$.

This is (partially) based on joint work with A. Zvavitch.