

## de Fromont: "Testing modified gravity with cosmic voids and compensated structures"

*Friday, 29 September 2017 16:45 (25 minutes)*

These last years, cosmic voids have been used as original probes for gravity and dark energy. This is motivated by the fact that these regions are expected to be safe from both baryonic and non linear physics unlike galaxy clusters or DM halos. However, these approaches are limited by the absence of a fully consistent model for cosmic voids.

In this talk, I will introduce a new model that provides predictions for both shape and statistics of these regions for any cosmology and redshift. Using this model, I will discuss their sensitivity to modified gravity such as  $f(R)$  theory and discuss the possibilities to constraint efficiently the nature of gravity in upcoming surveys.