

## **Saltas: "Challenging the consistency of scalar–field theories with derivative interactions from a fundamental viewpoint"**

*Wednesday, 27 September 2017 10:30 (25 minutes)*

In this talk, I will discuss the consistency of a large class of theories for dark energy and primordial inflation from a fundamental point of view. In particular, focusing on the effective theory of a single scalar field exhibiting non–linear derivative interactions, I will discuss the ultraviolet properties of the theory at the 1–loop level and beyond, and argue about the significance of understanding the initial conditions and consistency of phenomenologically successful theories at sufficiently high energies.