

# The Open Effective Field Theory of Dark Energy

*jeudi 6 novembre 2025 12:10 (20 minutes)*

Open effective field theories seek to incorporate dissipation and noise into our effective descriptions of gravity. These effects arise from the incomplete modelling of unknown components, which can significantly alter the dynamics of observable degrees of freedom. In this talk, I will introduce a framework that extends the standard effective field theory of dark energy, recovering it as a limit while incorporating local dissipation and noise. I will explore the resulting phenomenology in the scalar and tensor sectors, with a focus on the potential observational signatures of these effects. This construction provides a natural embedding for interacting dark energy models and establishes a versatile framework to investigate dissipative and stochastic effects in cosmology.

**Auteur:** Dr COLAS, Thomas (DAMTP - University of Cambridge)

**Orateur:** Dr COLAS, Thomas (DAMTP - University of Cambridge)