

# Observational Tensions in Kinetically Coupled Quintessence

*Friday 9 September 2022 16:40 (10 minutes)*

Understanding the nature of the accelerated expansion of the Universe stands as one of the most important open questions in Cosmology. Currently the most well-accepted paradigm relies on the introduction of two unknown components to the standard model that govern the dynamics of the Universe at present times Dark Energy, proposed as the source for the acceleration, and Dark Matter, needed to make formation of structures in the Universe possible. While it provides for an impressive fit to a wide range of astrophysical data, some significant statistical discrepancies between observations seem to indicate unreconcilable cracks in the standard theory, when faced with increasingly precise experiments. In this talk I will show how describing dark energy as a canonical scalar field, coupled to dark matter through a kinetic term in the Lagrangian, may help address the observational tensions.

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