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## Constrains on Dark Energy with cosmological proxies

*Thursday 30 May 2019 09:30 (30 minutes)*

In this talk we consider an effective parametrization for a scalar field that evolves in time, known as K-essence, to describe Dark Energy in the framework of FLRW metric. In the past, we constrained the free parameters of this model with luminosity distances of supernova Ia up to redshift 1.4. Now, we introduce different cosmological proxies, as BAO and CMB data from Planck, to complete the evolution of K-essence model at higher redshifts, missed by the supernovae sample. In addition, we discuss the most general family of solutions that can be considered to fulfil the dynamical system that arises from the K-essence equation of motion.

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