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A negative cosmological constant in the dark sector?

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Following theoretical (high-energy physics) considerations, we explore the possibility that our Universe contains a *negative cosmological constant*, dubbed λ, on top of an additional component X accounting for the late-time accelerated stage of expansion. In this talk, I will present some of the cosmological implications of introducing λ. In particular, we will assess the viability of such models when considering Baryon Acoustic Oscillations, SNeIa and CMB (geometrical) measurements. We estimate the Bayesian evidence in various cosmological scenarios through a nested sampling of the parameter space, and compare it to base-ΛCDM for model selection. We will briefly comment on their capability to address the current Hubble tension when a high-H_0 is taken into account.

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