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Introducing Bayesian Model Averaging to include model uncertainty in our cosmological parameters' estimates

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In this talk I am presenting Bayesian Model Averaging, a well established statistical technique that offers a principled approach to model uncertainty marginalization in a Bayesian context.Specifically, this talk goes through the two recent papers I published in which I describe an implementation of such methodology for Cosmological analyses with 1) an application to the early dark energy as a possible solution to the Hubble tension and 2) a broad application to some notorious tensions arising from the CMB and LSS datasets, as the number of neutrino species, the Dark Energy equation of state and the curvature of the Universe. In this talk I will present results from the application of BMA to the last publicly available Planck data and BAO measurements from BOSS and eBOSS.

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Session Classification: Current status of the H_0 and growth tensions: theoretical models and model-independent constraints

Track Classification: Cosmic Microwave Background, Cosmological Tensions (CM): Current Status of the H_0 and growth tensions: theoretical models and model-independent constraints