

First measurement of the Weyl potential evolution from DES Y3 data

Monday, June 10, 2024 3:10 PM (40 minutes)

In this talk I will present a new methodology to measure the Weyl potential, which is the sum of the spatial and temporal distortions of the Universe's geometry, in a model independent way. I will then present how combining galaxy clustering and galaxy-galaxy lensing data from DES Y3 we can provide the first direct measurement of the evolution of the Weyl potential at four different redshifts. I will end by showing the forecast precision of such measurements with stage IV surveys and the interest of combining these with data coming from spectroscopic galaxy surveys.

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