

IberiCOS 2022



Contribution ID : 2

Type : not specified

The last 10 billion years of cosmic structure growth

Wednesday, 4 May 2022 10:30 (15)

The current constraints on the S_8 parameter are subject of debate. Cosmic shear observations show a lower value than that predicted by Planck. For instance, KiDS finds results 3σ away from Planck's value and data from DESY1 also points in the same direction. In this talk I will show the data driven reconstruction of the evolution of the $S_8(z)$ parameter from a combination of 6 different data sets that include galaxy clustering, weak lensing and CMB lensing (with DESY1 and KiDS-1000 among them). I will show that these data constrain the amplitude of fluctuations in the range $0.2 \lesssim z \lesssim 2$ and give consistent growth histories. Furthermore, I will show that in the range $0.2 \lesssim z \lesssim 0.7$ current data prefer a lower value than that predicted by Planck and that it is mostly driven by cosmic shear observations.

Presenter(s) : GARCIA-GARCIA, Carlos (University of Oxford)