

Pujol: Mass mapping and galaxy bias in the Dark Energy Survey

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The study of the large scale structures of the Universe is an important tool to learn about cosmology. The relation between the clustering of matter and the clustering of galaxies is known as galaxy bias. On the other hand, gravitational lensing allows us to measure the dark matter distribution from the shapes of the source galaxies. In this talk I will present the largest weak lensing mass maps to date obtained from the Dark Energy Survey Year 1 data which covers around 1500 square degrees. I will also present a method to measure tomographic galaxy bias in observations from the combination of galaxy density and weak lensing maps, developed in Pujol et al. 2016 and applied to the Dark Energy Survey in Chang et al. 2016.