## **Euclid SPV3 meeting**



ID de Contribution: 3

Type: Non spécifié

## Testing the impact of scale-dependent multiplicative bias on the cosmological analysis of the 3x2pt statistics for Euclid.

mercredi 22 mars 2023 11:00 (20 minutes)

In this work, we study the effect of spatially-varying multiplicative bias on the cosmological parameter estimation in the combined photometric analysis of the 3x2pt statistics for a Euclid DR3 end-to-end forecast. To do so, we consider a spin-0 m-bias map characterized by a Gaussian profile angular power spectrum that has been studied in the literature. Also, we proceed with a conservative approach by choosing the most pessimistic scenario that has already been shown to give biased results exceeding the statistical error in a stage-IV cosmic shear analysis. This corresponds to a profile with a low multipole peak and large amplitude. In a pseudo-Cl analysis we perform the coupling of the m-bias map with the cosmic shear and the galaxy-galaxy lensing spectra and test their impact on the final 3x2pt cosmological analysis with an MCMC forecast for the LCDM and w0waCDM cosmologies and also applying optimistic and pessimistic scale cuts. Finally, we investigate the effect of the masked sky on the results.

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Classification de Session: Weak Lensing End-2-End box, status and performances

Classification de thématique: PSF tool kit, status and performances