

# Cosmology from ACT DR6 lensing cross-correlated with DES Y3 galaxies

*Tuesday, 14 May 2024 11:54 (5 minutes)*

In this work we present our pipeline for a joint analysis at the angular power spectrum level between measurements of galaxy positions from Dark Energy Survey Years 3 data release (DES Y3) and CMB lensing from the Atacama Cosmology Telescope Year 6 data release (ACT DR6) on a common area of around  $4000 \text{ deg}^2$ . We show preliminary results, including several null-tests and inference on realistic mocks to achieve few percent level constraints on the amplitude of matter fluctuations. In a future work we will combine this measurement in a joint analysis with DES Y3 cosmic shear data, setting the stage for next generation cross-correlation analyses.

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no

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**Session Classification:** Late Universe